EXHIBIT E

CERTIFIED COMMONWEALTH FISCAL PLAN

2019 Fiscal Plan for Puerto Rico

Restoring Growth and Prosperity

As certified by the Financial Oversight and Management Board for Puerto Rico

May 9, 2019

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For the avoidance of doubt, the Oversight Board does not consider and has not considered anything in the 2019 Fiscal Plan as a "recommendation" pursuant to Section 205(a) (with the exception of that which is described in Sections 12.12 and 12.13, which were explicitly submitted pursuant to Section 205(a) and are now adopted as appropriate pursuant to Section 201(b)(1)(K)). Nevertheless, to the extent that anything in the 2019 Fiscal Plan is ever deemed a "recommendation" pursuant to Section 205(a), the Oversight Board hereby adopts it as appropriate in the 2019 Fiscal Plan pursuant to Section 201(b)(1)(K).

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- Any future actions taken or not taken by the United States government related to Medicaid or the Affordable Care Act;
- The amount and timing of receipt of any distributions from the Federal Emergency Management Agency and private insurance companies to repair damage caused by Hurricanes María and Irma;
- The amount and timing of receipt of any amounts allocated to Puerto Rico and provided under the Community Disaster Loans Program;
- The amount and timing of receipt of any additional amounts appropriated by the United States government to address the funding gap described herein;
- The timeline for completion of the work being done by the Puerto Rico Electric Power Authority ("PREPA") to repair PREPA's electric system and infrastructure and the impact of any future developments or issues related to PREPA's electric system and infrastructure on Puerto Rico's economic growth;
- The impact of the measures described herein on outmigration; and
- The impact of the resolution of any pending litigation in the Title III cases

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List of Acronyms and Key Terms

AAFAF Puerto Rico Fiscal Agency and Financial Advisory Authority

(Spanish acronym)

ADEA Agricultural Enterprise Development Administration (Spanish acronym)

Administration of Governor Ricardo Rosselló

April 2018 Fiscal Plan Fiscal Plan certified April 2018, immediately following Hurricanes Maria and Irma which first set out the major reforms

ASEM Puerto Rico Medical Services Administration (Spanish acronym)
ASES Puerto Rico Health Insurance Administration (Spanish acronym)

CAFR
Comprehensive Annual Financial Report
CAGR
Compound Annual Growth Rate
CBO
Congressional Budget Office
CDBG
Community Development Bank Grant
CHIP
COFIM
La Corporación de Financiamiento Municipal

COFINA Puerto Rico Sales Tax Financing Corporation (Spanish acronym)

COSSEC Public Corporation for the Supervision and Deposit Insurance of Puerto Rico Cooperatives (Spanish acronym)

COR3 Central Office for Recovery, Reconstruction, and Resiliency

DCR Department of Corrections and Rehabilitation

DB Defined Benefit pension plan
DC Defined Contribution pension plan

DDEC Puerto Rico Department of Economic Development Commerce (Spanish acronym)

DOH Department of Health DOJ Department of Justice DPS Department of Public Safety Debt Sustainability Analysis DSA FITC Earned Income Tax Credit **ERS** Employee Retirement System FAM Municipal Administration Fund FDI Foreign Direct Investment Federal Government The U.S. Federal Government

FEMA Federal Emergency Management Agency
FMAP Federal Medical Assistance Percentage (FMAP)

FOMB Financial Oversight and Management Board for Puerto Rico

FQHC Federally Qualified Health Center

FYTD Fiscal-Year-To-Date

GAO U.S. Government Accountability Office

GDB Government Development Bank for Puerto Rico

GDP Gross Domestic Product

GF General Fund

GFEWG Governor's Fiscal and Economic Working Group

GNP Gross National Product
Government Government of Puerto Rico
Governor Governor Ricardo Rosselló
Hacienda Puerto Rico Department of Treasury

HHS U.S. Department of Health and Human Services
HUD U.S. Department of Housing and Urban Development

Hurricanes Hurricane Irma and Hurricane Maria
IFCU Independently Forecasted Component Units

IMF International Monetary Fund

IPR Invest Puerto Rico
Island Puerto Rico

KPIs Key Performance Indicators LEA Local Education Agency

LEA Local Education Agency
Fiscal Plan certified by the Financial Oversight and Management Board in March 2017, before Hurricanes Maria and

March 2017 Fiscal Plan

Irma hit the Island

MADs

Maximum Annual Debt service

MCOs Managed Care Organizations
MFCU Medicaid Fraud Control Units

Mi Salud Medicaid program in Puerto Rico (now called VITAL)

MMIS Medicaid Management Information System

NAP Nutrition Assistance Program (Spanish: Programa de Asistencia Nutricional, PAN)

NRW Non-Resident Withholdings

OCFO Office of the CFO

October 2018 Certified Fiscal Plan certified by the Financial Oversight and Management Board in October 2018, updated for 2018 revenue

Fiscal Plan and expenditure actuals
OMB Office of Management and Budget
P3 Public Private Partnerships
P3 Authority Public Private Partnership Authority

PA Public Assistance

Parties AAFAF and the Government

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PayGo

Defined benefit actuarial responsibility program by which agencies and instrumentalities are responsible for paying

their pensions obligations on an annual basis via a "PayGo Charge"

PBA Public Buildings Authority

Platino Medicare Advantage program that also provides Medicaid wraparound services equivalent to Mi Salud / VITAL

program

PMO Program Management Office
PMPM Per Member Per Month

PRASA Puerto Rico Aqueduct and Sewer Authority
PRCCDA Puerto Rico Convention Center District Authority

PRDE Puerto Rico Department of Education

PREB Puerto Rico Energy Bureau

PREMA Puerto Rico Emergency Management Agency
PREPA Puerto Rico Electric and Power Authority
PRHFA (or HFA) Puerto Rico Housing Finance Authority

PRHTA (or HTA)

Puerto Rico Highway and Transportation Authority
PRIDCO

Puerto Rico Industrial Development Company
PRITS

Puerto Rico Information Technology Service

PROMESA Puerto Rico Oversight, Management and Economic Stability Act

PRPB Puerto Rico Police Bureau
PRTC Puerto Rico Tourism Corporation
PSC Puerto Rico Public Service Commission

RFQP Request for Proposal
SCO State Coordinating Officer
SRF Special Revenue Fund
SR Structural Reform
SUT Sales and Use Tax

SIFC State Insurance Fund Corporation

TANF Temporary Assistance for Needy Families

UPR University of Puerto Rico

WIOA Workforce Innovation and Opportunity Act

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EXECUTIVE SUMMARY

The people of Puerto Rico need and deserve plentiful good jobs, a dynamic and prosperous economy, affordable and reliable electricity, and an efficient and responsive public sector—but have not had any of these things for more than a decade. Instead, since 2005, the number of people living under the poverty level has increased, the economy has shrunk, electricity has remained expensive and unreliable, labor market regulations have remained burdensome—hindering job creation for the people—and the public sector has provided declining levels of service at a high cost to residents. These problems predate Hurricanes Maria and Irma and will continue to plague Puerto Rico long after it recovers from the storms unless a bold set of fiscal and structural reforms are implemented.

Based on much of the Government's proposed fiscal plan, this 2019 Fiscal Plan for the Commonwealth (the "2019 Fiscal Plan") outlines a number of the structural reforms and fiscal measures that, **if implemented by this Government, will help to provide Puerto Ricans with a positive economic trajectory, a twenty-first century electricity grid, resilient infrastructure, and a more effective and efficient public sector.** Full implementation of this 2019 Fiscal Plan will also put Puerto Rico on the path to meeting the core objectives laid out in the Puerto Rico Oversight, Management, and Economic Stability Act (PROMESA): achieving fiscal responsibility and balance within five years and regaining access to the capital markets.

Therefore, while this 2019 Fiscal Plan provides for many actions that the Government of Puerto Rico must take, **unless the Government commits to more ambitious reforms, Puerto Rico will not be able to overcome all of the problems that have plagued its economy for over a decade,** and the Government will have lost a critical window of opportunity to restore long-term fiscal sustainability and achieve long-term economic growth and prosperity for the people of Puerto Rico.

* * *

Puerto Rico has been mired in an economic and demographic downward spiral for over a decade. As of April 2018, the economy was \$16 billion smaller in real terms and the population was nearly half a million smaller (largely due to outmigration) than it was in 2005 – trends that, before Hurricane Maria, were projected to continue. Over 40% of the population lives below the poverty line, and ~47% are dependent on Medicaid for healthcare. Since Hurricanes Maria and Irma, 5% of the population has left the Island, with another 1.4% projected to leave annually on average from 2019 to 2024, with the median age on the Island projected to rise from 42 in FY2018 to 53 by FY2049. Meanwhile, the consolidated Commonwealth's outstanding debt and pension liabilities have grown to over \$120 billion, with more than \$70 billion in financial debt and more than \$50 billion in pension liabilities—an amount almost twice the size of Puerto Rico's economy.

These pre-Maria problems are not new and temporary—they are long-standing and structural. For decades, the private sector has been overly reliant on now expired federal tax advantages while having to operate in a difficult business climate with poor infrastructure and expensive and unreliable electricity and transit systems. Other challenges include a public sector that is significantly larger than that of a typical U.S. state yet often has provided low-quality service, as well as a labor force participation rate that is among the lowest in the world.

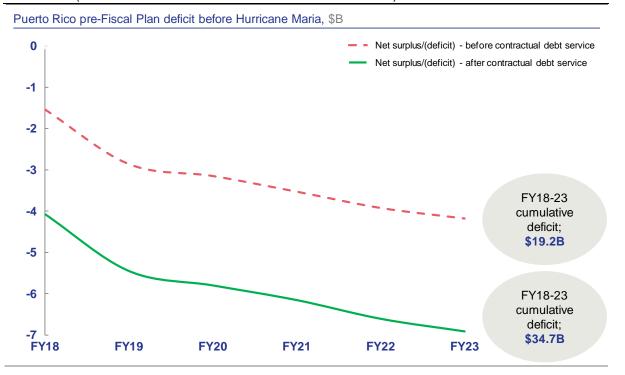
Puerto Rico has also had a fiscal management challenge for years, with actual revenues lower and actual expenses higher than projected, creating a growing deficit (**Exhibit 1**). This deficit is difficult to forecast with certainty, however, because of the protracted delays in issuing annual audited financial statements, lack of proper fiscal controls, and poor financial

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¹ The World Bank Group

management. Puerto Rico has also been in an economic structural decline for over a decade, which has meant an eroding tax base. Even before Maria, the annual primary deficit was growing. To finance these primary deficits, Puerto Rico resorted to issuing debt which became unsustainable. As the Oversight Board began its work in 2016, the Commonwealth was projected to run structural annual deficits exceeding \$7 billion, or \$3 billion before debt service.

EXHIBIT 1: PROJECTED PRE-MARIA DEFICIT BEFORE MEASURES AND STRUCTURAL REFORMS (PRE- AND POST- CONTRACTUAL DEBT SERVICE)



It was amidst these protracted demographic, fiscal, and debt crises that Hurricanes Maria and Irma hit the Island. Hurricane Maria has caused unprecedented and catastrophic damage to Puerto Rico, its people, and its businesses. According to current estimates, Hurricane Maria has created tens of billions in damage², and is estimated to have caused a real decline to GNP of 4.7%³ in FY2018. On the other hand, tens of billions in federal and private funding is projected over the long-term to be invested in helping Puerto Rico recover and rebuild from Hurricane Maria. The 2019 Fiscal Plan is thus written assuming substantial and timely support from the Federal Government. While Puerto Rico will likely experience a brief stimulus from this federal disaster relief funding and is benefiting from a temporary reprieve from debt service due to PROMESA and Title III, Puerto Rico must change its underlying economic foundations to prevent fiscal imbalances from inevitably returning. Only by attacking the structural problems plaguing Puerto Rico will it have laid the groundwork for a new, growing, resilient economy.

Puerto Rico must urgently adopt a series of bold actions to improve its fiscal and economic trajectory. These reforms and measures are essential to restoring growth, opportunity, and prosperity to the people and businesses of Puerto Rico, and to making the Government of Puerto Rico more efficient, effective, and responsive to its residents.

² Based on federal estimates as of September 2018

³ Puerto Rico Planning Board, May 2019

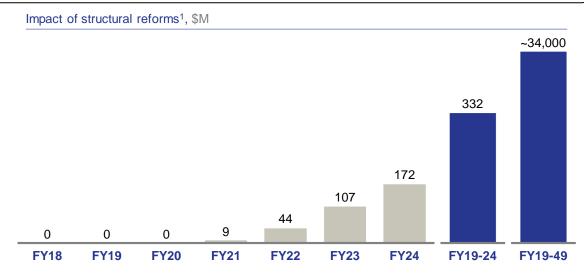
Structural reforms

The 2019 Fiscal Plan proposes a series of reforms ("structural reforms") to improve the trajectory of the economy and drive growth (**Exhibit 2**). The 2019 Fiscal Plan includes updated forecasts for the impacts of these structural reforms based on the implementation status of these reforms.

- Human capital and welfare reform: Promoting participation in the formal labor force by creating incentives to work through Earned Income Tax Credit (EITC) benefits and Nutritional Assistance Program (NAP) reform, as well as providing comprehensive workforce development opportunities. EITC and NAP reform are projected to increase economic growth by 0.15% by FY2025. Education and workforce development opportunities are projected to add an additional 0.17% from FY2033-2049.
- Ease of doing business reform: Promoting economic activity and reducing the obstacles to starting and sustaining a business in Puerto Rico through comprehensive reform to improve ease of paying taxes, registering property, and obtaining permits. These reforms are projected to drive a 0.40% uptick in overall growth by FY2023.
- Power sector reform: Providing low-cost and reliable energy through the transformation of PREPA and establishment of an independent, expert, and wellfunded energy regulator. This reform is projected to increase growth by 0.30% by FY2023.
- *Infrastructure reform:* Prioritizing economically transformative capital investments with federal funds.

Note that the reforms listed above are ones that the Government has committed to implementing and does not represent a comprehensive list of structural reforms that the Government could pursue or that would benefit Puerto Rico. For example, improving labor market flexibility through repealing restrictive laws like Law 80 and creating labor conditions more similar to those on the mainland would lead to increased labor force participation rates and much higher economic growth.

EXHIBIT 2: IMPACT OF STRUCTURAL REFORMS



1 Structural reforms begin in FY21, and thus have no impact from FY18-FY20

Fiscal measures

The 2019 Fiscal Plan proposes a set of fiscal actions that the Government must take ("measures") to increase Government revenues and reduce Government expenditures (Exhibit 3):

- Creation of Office of the CFO: Instituting fiscal controls and accountability and improving governance, accountability, and transparency
- Agency efficiencies: Consolidating agencies and deploying new management tools and practices to deliver better governmental services for substantially lower cost
- Healthcare reform: Reducing healthcare cost inflation through a comprehensive new healthcare model that prioritizes high quality, cost-effective care
- Enhanced tax compliance and optimized taxes and fees: Employing new technology
 and other innovative and now commonly used practices in other jurisdictions to
 broaden the tax base, reduce fraud, and improve fairness to boost overall tax revenues;
 adjusting existing taxes and fees to capture revenues from under-leveraged sources
- Reduction of appropriations: Lowering the fiscal burden on the Commonwealth and encouraging sound fiscal self-management by reducing appropriations to municipalities and the University of Puerto Rico, while instituting an independent scholarship fund for low-income UPR students
- Comprehensive pension reform: Improving the financial stability of public employees through a reform that would maintain enough funds to comply with the payment of pensions and to provide the administration necessary to maintain a defined contribution plan for employees

Investment in core priorities

The above structural reforms and fiscal measures are important to transform the fiscal and economic trajectory of the Island. In addition, in times of constrained resources, it is important to focus. As such, the 2019 Fiscal Plan includes investments in the following core areas:

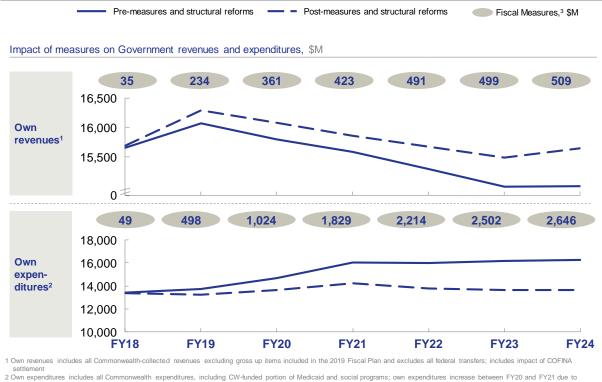
- Police compensation and equipment: Currently, sworn officer salaries and benefits in Puerto Rico are not competitive and are insufficient to recruit new cadets. The 2019 Fiscal Plan will make a significant investment to ensure salaries and mandatory benefits for sworn officers are increased 30% (by roughly \$11,500) over two years, provide a \$250 investment per sworn officer per year in life and disability insurance, and enact Social Security for police as of July 2019. Finally, the 2019 Fiscal Plan includes ~\$122 million per year from FY2019 to FY2021 to cover back pay for police. These investments are meant to ensure that more sworn officers are able to remain on Island and serve in the field. Additionally, the 2019 Fiscal Plan includes \$42 million in funding for bulletproof vests, radios, and vehicles.
- Healthcare: Healthcare agencies on Island are currently struggling to meet patient needs. As a result, the 2019 Fiscal Plan includes \$15+ million in funding to maintain current nurse staffing levels across the Island, and also invest in strategic health centers, such as \$25 million for the Puerto Rico Cancer Center to enable it to become fully operational, \$2 million for the Cardiovascular Center of Puerto Rico and the Caribbean for medical products and materials, and \$12 million for the Psychiatric Hospital to enable it to improve services to obtain Medicare certification. Further, the 2019 Fiscal Plan provides \$4 million in capital expenditures for medical, emergency room and office equipment across three health agencies. The 2019 Fiscal Plan also

increases funding by \$1.4 billion in Medicaid over FY2020-FY2024 to support the stability of the healthcare system.

- Education: In addition to the investments made as of the October 2018 Certified Fiscal Plan, which provided for a \$5,000 salary increase for directors, \$1,500 salary increase for academic teachers, and ~\$70 million for textbooks (through three one-time investments across FY2019-FY2021), the 2019 Fiscal Plan provides an additional \$500 salary increase for all teachers and directors in FY2020. Moreover, the 2019 Fiscal Plan provides \$39 million for the UPR scholarship fund beyond the \$35 million committed in FY2019, for a total of \$214 million over FY2019-FY2024.
- Firefighter salaries and equipment: Firefighters similarly face a challenge with the competitiveness of their compensation. The 2019 Fiscal Plan provides for a \$500 increase for all firefighters as well as \$2 million for enhanced equipment and materials and \$14 million in capital expenditures to cover trucks, vans, and fire pumps.
- Forensics Sciences Institute payroll and equipment: The Forensics Sciences Institute has struggled, especially in the wake of Hurricanes Maria and Irma, to respond to the needs on Island. It has experienced backlogs in cases and physical capacity constraints. As such, the 2019 Fiscal Plan invests \$4.5 million in payroll to enable the hiring of forensics scientists, pathologists, examiners, and DNA specialists, as well as \$750 thousand for laboratory equipment and chemicals.
- Capital improvement projects: The Commonwealth must pursue capital projects to improve the infrastructure on Island. As such, the 2019 Fiscal Plan includes an additional \$85 million annually in capital expenditures funded through Special Revenue Funds (in addition to the \$400 million in General Fund capital expenditures provided for the Commonwealth, UPR, and HTA), as well as a cost share reserve of \$100 million per year to support FEMA-funded rebuilding efforts requiring local cost match (beyond the anticipated CDBG funds available).

The goal of these investments is to ensure these agencies can continue to provide the services residents depend on while implementing the necessary efficiencies needed to maintain sustainable operations on Island.

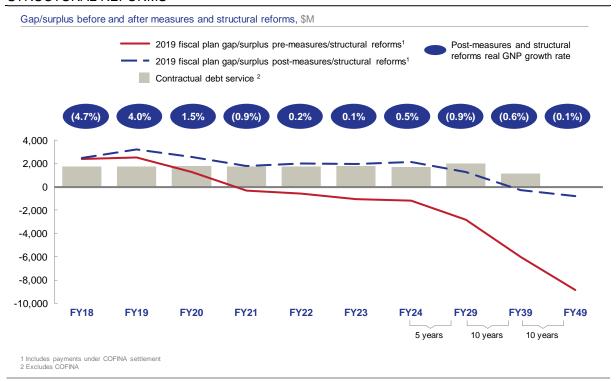
EXHIBIT 3: IMPACT OF REVENUE AND EXPENDITURE MEASURES ON OWN REVENUES AND **EXPENDITURES**



Medicaid Supplemental Funding phase out 3 Comprised only of fiscal measures attributable to the Commonwealth

Implementing these structural reforms and fiscal measures, which will provide lowcost and reliable energy, robust infrastructure, more incentives to enter the formal labor market, an improved regulatory and permitting environment, and a more effective and efficient public sector, will improve the economy and services provided for the people of Puerto Rico.

EXHIBIT 4: 2019 FISCAL PLAN PROJECTED SURPLUS BEFORE AND AFTER MEASURES AND STRUCTURAL REFORMS



The Government of Puerto Rico cannot afford to meet all its contractual debt obligations, even with aggressive implementation of these reforms and measures. Puerto Rico is committed to repaying an affordable and sustainable amount of its outstanding debt. However, Puerto Rico needs a comprehensive restructuring of its debt—in addition to the adoption of pro-growth structural reforms—to have renewed access to capital markets and to create the basis for a sustainable economy. The first step in this restructuring occurred in February 2019 with the settlement of debt held by COFINA bondholders. The best time to implement these reforms and restructure the debt is while Puerto Rico has the temporary benefits of federal disaster relief funding and a stay on debt service. Therefore, time is of the essence. The 2019 Fiscal Plan lays out a prudent and integrated set of actions to restore fiscal balance in the short and medium term and outlines **opportunities for more ambitious additional reforms** to create a vibrant economy in the long term.

Such additional ambitious reforms are necessary because the 2019 Fiscal Plan projects deficits from FY2038 onward (Exhibit 4). That means a Puerto Rico government in the near future will be required to take additional measures that go beyond the five-year framework of this 2019 Fiscal Plan to be able to have balanced budgets and a growing economy. Many of these reforms—which would reduce deficits and therefore make funds available for a variety of potential uses, including investment in the people of Puerto Rico—have been proposed by the Oversight Board, but the Oversight Board cannot implement them without the support of Puerto Rico's elected Government.

PART I: Context for Puerto Rico's current economic and fiscal challenges

Chapter 1. LONG-TERM ECONOMIC TRENDS IN PUERTO RICO

Before being hit by the most powerful hurricane to strike the Island in almost a century, Puerto Rico's economy had been in an acute structural decline for over a decade, the Government had defaulted on much of its debt, and nearly half of Puerto Ricans lived below the national poverty line. The reasons for these problems are multiple, but the root causes stretch back 40 years.

In the 1940s and 1950s, led by Operation Bootstrap, Puerto Rico's economy grew rapidly and productivity increased by 5% per annum as it transitioned from an agricultural-led to a manufacturing-led economy. However, as economic performance began to decline in the 1970s, the Federal Government adopted two significant policies to help Puerto Rico shore up its economy.

First, transfer programs increased dramatically, particularly as Puerto Rico started receiving Nutritional Assistance Program (NAP) funding, eventually providing, in aggregate, a proportion of residents' personal income that was twice the U.S. mainland average. In addition to raising costs for the Government, these programs at times created disincentives to work due to benefits that were high relative to wages available in the formal labor market.

Second, in 1976, Section 936 of the federal tax code was introduced to promote investments by companies that could transfer their "intangible assets" to Puerto Rico, and thereby shift profits to the Island. These Section 936 companies, which were mostly in pharmaceuticals and life sciences, became a pillar of Puerto Rico's economy, creating valuable local supply chains and local banking deposits, and contributing substantial tax revenue. In the same year, Puerto Rico passed Law 80, which instituted protections against wrongful discharge for Puerto Rican workers and mandated severance for firms attempting to remove employees. This law made Puerto Rico's labor market significantly more rigid and placed it out of step with the prevailing labor markets in the mainland U.S. (especially markets with which Puerto Rico competes for companies and talent, such as Florida).

In 1996, Congress decided to end Section 936, gradually phasing it out by 2006. In the face of an anemic local private sector, the Government also expanded its employment to the point that by 2000, 30% of Puerto Rico's jobs were in Government and a full 40% of workers with college degrees worked in the public sector. Major sectors like water, electricity and ports are still run by public corporations, and have consistently created a drain on the economy by delivering lower quality services at high costs while crowding out private investment. There is also pervasive cross-subsidization among the Commonwealth, public corporations and other parts of the public sector that obfuscates financial management and accountability. Finally, there is a high degree of political interference in decisions that affect every aspect of Puerto Rican life. As a result, today Puerto Rico underperforms on all important measures of a modern economy, including educational attainment, cost of electricity, quality of water, tax compliance, and labor market participation.

To promote the private sector, the Government undertook a broad tax incentives policy that led to a highly complex web of subsidies and special tax arrangements. These actions neither promoted growth nor treated companies equitably. Furthermore, generous government and federal transfer programs boosted incentives that resulted in many workers choosing either not to work or to receive benefits and work in the informal economy without paying taxes. Tax

compliance has never been adequate in Puerto Rico, and it became increasingly difficult in this environment.

Government revenues suffered and became increasingly hard to forecast. To make up for this recurring and growing budgetary shortfall, the Commonwealth turned to debt markets. Puerto Rico bonds found themselves in every corner of the U.S. bond market and, as investor appetite began to wane, the Government turned to securing new debt by pledging various revenue streams. The result was a highly complex financial structure that limited transparency as well as financial accountability and management.

When the Great Recession hit in 2008, Puerto Rico's economy was already in a fragile fiscal and financial position. Since then, the economy has continued to worsen — Puerto Rico has seen its GNP shrink by 20%, labor participation has fallen to a record low of 38%, and the Island's population has fallen by 10%. Today, Puerto Rico is much poorer relative to the U.S. than it was in 1970.

Chapter 2. ENACTMENT OF PROMESA

By 2016, Puerto Rico had accumulated over \$50 billion in unfunded pension liabilities and over \$70 billion of debt and was facing an imminent default. Because Puerto Rico and its public corporations cannot take advantage of Chapter 9 of the U.S. Bankruptcy Code, and an attempt to create a territorial bankruptcy law was struck down by the U.S. Supreme Court, Congress stepped in to head off Puerto Rico's financial and debt crisis by passing PROMESA, the Puerto Rico Oversight, Management, and Economic Stability Act. PROMESA imposed an automatic stay on Puerto Rico's debt obligations and created the Financial Oversight and Management Board for Puerto Rico (the "FOMB" or "Oversight Board"). The Oversight Board is tasked with restructuring Puerto Rico's staggering debt burden and restoring sustained economic growth to Puerto Rico so that the Government can achieve fiscal balance and access to the capital markets.

Immediately after its formation, the Oversight Board began working with the Government of Puerto Rico to create a fiscal plan that would help the Government achieve fiscal responsibility and regain access to the capital markets. The outcome of this work was the Commonwealth Fiscal Plan that the Oversight Board certified on March 13, 2017 (the "March 2017 Certified Fiscal Plan"). A few months later, the Oversight Board filed for Title III for the Commonwealth Government, COFINA, HTA, ERS, and PREPA.

In September 2017, just months after the certification of the March 2017 Fiscal Plan, Hurricanes Irma and Maria struck the Island, causing great devastation and fundamentally altering the Island's macroeconomic reality, and ultimately requiring a new fiscal plan.

Chapter 3. FISCAL PLAN UPDATES DUE TO HURRICANES MARIA & IRMA AND OTHER EVENTS

On September 6, 2017 and September 20, 2017, Hurricanes Irma and Maria struck Puerto Rico, causing unprecedented humanitarian, economic, and infrastructure-related damages and upending the daily lives of Puerto Rico's over three million residents. Thousands of residents were left homeless, basic utilities were completely shut down (and took months to become operational), and schools, hospitals, and businesses were destroyed. Tens of thousands of Puerto Ricans fled the Island. The Federal Government's response has become one of the largest and most complex disaster recovery efforts in U.S. history.

The damage inflicted on Puerto Rico by Hurricane Maria required that the March 2017 Certified Fiscal Plan be revised. Therefore, on October 31, 2017, the Oversight Board formally requested that the Government submit a revised fiscal plan for the Commonwealth and its instrumentalities. After months of hard work, engagement with stakeholders, and intense negotiations with the Government, the Oversight Board determined that the fiscal plan complied with the requirements of PROMESA, and accordingly, certified it in April 2018.

Due to further Government and Oversight Board discussions concerning the repeal of Law 80, the Oversight Board certified an updated fiscal plan in May 2018. Given the lack of political will to pass much needed labor reform, the Oversight Board updated and certified an updated fiscal plan in June 2018. That plan served as the basis for the FY2019 Budget. The October 2018 Certified Fiscal Plan was subsequently certified to reflect actual revenue and expenditure numbers, refined healthcare projections based on actuarial estimates, new federal fund estimates, and changes in Government policy that affect overall growth. During the course of the FY2020 budget process, the Oversight Board received substantial new information regarding Government revenues and expenditures and has updated and certified this 2019 Fiscal Plan to reflect that data, the latest macroeconomic data and the pace of recovery spending to date.

Relative to the October 2018 Certified Fiscal Plan, the 2019 Fiscal Plan incorporates a number of important updates for new information and data, as well as focused investments and fiscal priorities, including:

- Revised macroeconomic forecast in light of slower disaster recovery funding rollout, faster unwinding of the associated stimulus, and new Planning Board data on Puerto Rico GNP and inflation, and CBO data on US inflation and GNP
- Updated population forecast for new data related to out-migration and fertility rates
- Updated scoring of labor/welfare reform and ease of doing business reform to reflect delays in or inadequate implementation to date, and updated power reform to reflect revised timelines
- Updates to baseline revenues and expenditures based on new data received during the FY2020 budget process and from revenue actuals
- Revised pensions baseline expenditures reflecting latest pension system census data, and revised timeline of measures and associated social security investment
- Updated Medicaid enrollment data coupled with additional funding to support stability within the public healthcare system, while still driving meaningful reform
- Re-balanced spending across agencies to invest in police and public safety, healthcare, education, while enhancing measures required by other agencies (e.g., WIPR, Legislature, State Elections Commission, the State Insurance Fund Corporation, and the Automobile Accident Compensation Administration), and further reducing low visibility and ineffective spend
- Additional funding for Special Revenue Fund capital expenditures and local cost share in case CDBG funding is inadequate
- Perspective on surplus potentially inaccessible to the Commonwealth

As this 2019 Fiscal Plan is being certified one year into the implementation of Fiscal Plan reforms, it includes reference to implementation made to date, while continuing to reflect the overarching requirements of the Fiscal Plan. As such, implementation exhibits include milestones that refer to the October 2018 Certified Fiscal Plan timelines — as such, some of the dates will have passed without Government completion of the action. The Government must take action to address these missed milestones and to accelerate the pace of change.

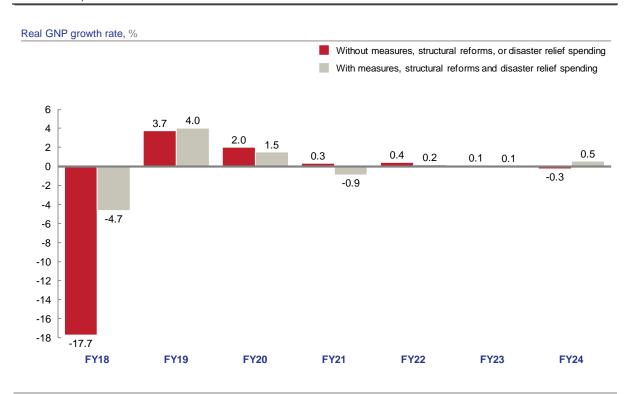
PART II. Puerto Rico's path to fiscal and economic sustainability

Chapter 4. MACROECONOMIC AND DEMOGRAPHIC TRAJECTORY POST-MARIA

4.1 Macroeconomic projection

The 2019 Fiscal Plan must grapple with how the shock of Hurricanes Irma and Maria will create a new economic reality for Puerto Rico in the years to come. Given this context, the 2019 Fiscal Plan includes a forecast of the near-term macroeconomic volatility in the wake of the storms. In FY2018, there was a significant decline in economic activity after the storms, followed by a bounce-back that continues into FY2019. **Exhibit 5** shows pre- and post-measures, structural reforms GNP for the period of the Fiscal Plan.

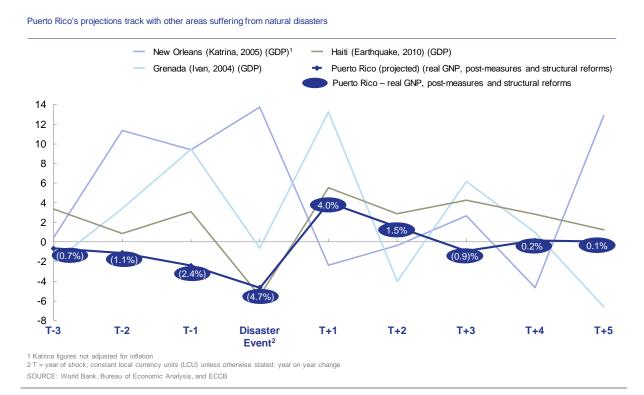
EXHIBIT 5: REAL GNP GROWTH RATE BEFORE AND AFTER MEASURES, STRUCTURAL REFORMS, AND DISASTER RELIEF FUNDING



This trendline has similarities to the volatile growth trendlines faced by other jurisdictions that have suffered from major natural disasters⁴ (**Exhibit 6**).

⁴ Relief aid after the Haitian Earthquake represented nearly 200% of overall GDP, providing a major economic "cushion" after the disaster. In Grenada, disaster aid equaled about two-thirds of GDP at the time, and despite declines immediately after the hurricane, revenues returned to pre-storm levels after about two fiscal quarters, with growth rebounding quickly. The year after Hurricane Ivan (2005), Grenada's economy grew at a faster rate than any year since 1985, at a clip of 12.5%.

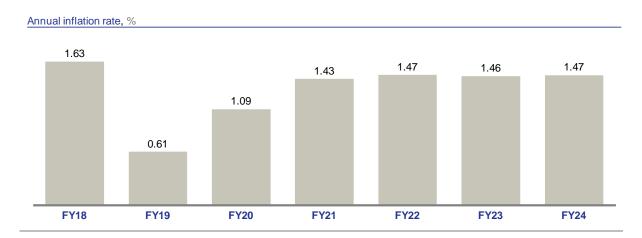
EXHIBIT 6: PUERTO RICO'S PROJECTED GROWTH TRAJECTORY COMPARED TO OTHER JURISDICTIONS AFTER NATURAL DISASTERS



The economic outlook model, which forecasts GNP growth, primarily relies on a comprehensive data set on the Puerto Rican economy from 1965 to 2017. It includes dozens of variables that collectively describe the Puerto Rican economy (e.g., growth, population, capital stock, etc.),⁵ and is largely impacted by four major factors: a) the pre-hurricane trendline of Puerto Rico, b) short- and long-term impacts from the storm on economic activity and capital stock, c) the stimulative impact of disaster relief assistance (discussed in *Section 4.2*), and d) proposed fiscal measures and structural reforms (discussed in *Section 4.3* and 4.4).

Puerto Rican economic growth projections are also affected by U.S. mainland growth projections, which in the 2019 Fiscal Plan are derived from the Congressional Budget Office (CBO) projections. The 2019 Fiscal Plan also uses CBO U.S. inflation projections. Puerto Rican inflation projections are summarized in **Exhibit 7** and have been updated to reflect the drop in inflation experienced to date in FY2019.

⁵ The forecast relies on a 60-year comprehensive dataset and applying statistical regressions to show the effects of multiple yet distinct inter-related components of past hurricanes, exogenous developments, and economic policies on growth and inflation



4.2 Disaster relief spending

Disaster spending tends to have a short-term stimulative effect on an economy post-crisis (though not in the long term). In Puerto Rico, the level of public and private disaster relief spending is anticipated to be significant when compared to the overall size of the economy. Public and private disaster relief spending will impact the economy in two ways:

- Stimulative impact caused by total disaster relief spending that is greater than 100% of the Island's 2018 GNP. This stimulus can come in multiple forms such as construction companies hiring local, unemployed workers or workers from the mainland U.S. paying local withholding taxes and spending money for food and lodging.
- **Expected reconstruction of the capital stock on the Island.** The 2019 Fiscal Plan factors in significant damage to capital stock that is repaired, in large part, by this significant infusion of federal and private monies, contributing to the bounce-back anticipated in FY2019 and for the bump in growth above pre-Maria trend thereafter.

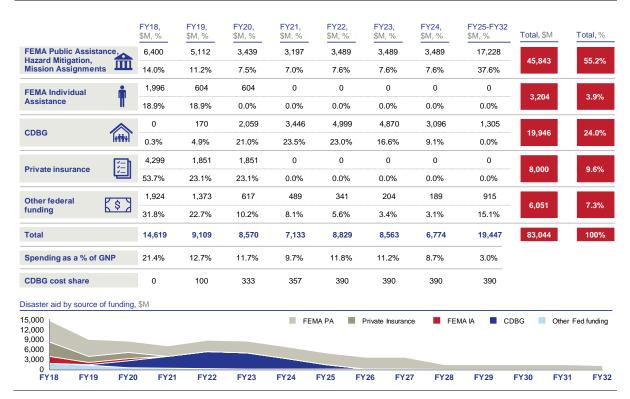
The 2019 Fiscal Plan projects that ~\$83 billion of disaster relief funding in total (Exhibit 8), from federal and private sources, will be disbursed in the reconstruction effort. It will be used for a mix of funding for individuals (e.g., reconstruction of houses, personal expenditures related to the hurricane such as clothing and supplies), funding for the public (e.g., reconstruction of major infrastructure, roads, and schools), and to cover part of the Commonwealth's share of the cost of disaster relief funding (recipients often must match some portion of federal public assistance spend⁶).

Of that, ~\$49 billion is estimated to come from FEMA's Disaster Relief Fund (DRF) for public assistance, hazard mitigation, mission assignments, and individual assistance. An estimated \$8 billion will come from private and business insurance pay outs, and \$6 billion is related to other federal funding. The 2019 Fiscal Plan includes ~\$20 billion from the Community Development Block Grants Disaster Relief program (CDBG-DR), of which ~\$2.4 billion is estimated to be allocated to offset the Commonwealth's and its entities' expected cost-share requirements. This portion of CDBG funding will go towards covering part of the ~10% cost share burden on expenditures attributable to the Commonwealth, PREPA, PRASA, and HTA from FY2019 to FY2025, given statutory requirements regarding the timeline of CDBG spending. The 2019 Fiscal Plan also allocates \$1.8 billion for Commonwealth-funded cost share over the life of the storm, which

⁶ Puerto Rico's cost-match responsibility was estimated using FEMA-provided data, adjusted by category as necessary for waivers and exceptions

includes \$100 million per year in FY2020 to FY2025 to cover local cost share in the event that fewer CDBG funds than anticipated become available.

EXHIBIT 8: PROJECTED PRIVATE AND PUBLIC DISASTER RELIEF FUNDING ROLL OUT



The major sources of disaster relief funding are detailed below:

- **FEMA Disaster Relief Fund (DRF):** FEMA provides Individual Assistance to individuals and families who have sustained uncovered losses due to disasters. FEMA also provides Public Assistance for infrastructure projects and other permanent improvements. FEMA's Hazard mitigation funds projects to reduce or eliminate long-term risks. FEMA's Mission Assignments provide emergency work and debris removal services primarily in the immediate aftermath of the disaster.⁷
- HUD Community Development Block Grant- Disaster Recovery (CDBG-DR): Based on a housing recovery plan, HUD provides CDBG-DR funding that can be used for assistance to individuals (e.g., housing repair) and public assistance (e.g., infrastructure development), or by the Government for certain operational costs (e.g., to cover their disaster relief cost match.) The 2019 Fiscal Plan assumes, based on directives in the supplemental appropriation included in the Bipartisan Budget Act of 2018, that about ~\$2 billion will be used to repair the Island's electric infrastructure (Public Assistance), and that ~\$2.4 billion in CDBG funding will be used to cover cost share for the Commonwealth and its instrumentalities for seven years per statute.
- **Private insurance funding:** Large personal property and casualty losses have been incurred in the aftermath of Hurricane Maria. Early analysis of data from the Office of the Insurance Commissioner of Puerto Rico, adjusted for self-insured and other types of coverage, was used to determine the amount that will be paid out to individuals and businesses for major damages.

⁷ The 2019 Fiscal Plan does not attribute economic impact FEMA's Administrative funding, which is used for FEMA's personnel (primarily outside of Puerto Rico), travel, and other internal costs.

■ Other supplemental federal funding: Additional federal funding has been allocated to various agencies and projects in Puerto Rico following the hurricane. This money is directed at a wide range of recovery efforts, from reconstruction of damaged buildings (for example, funding to repair damage to Job Corps centers in Puerto Rico) to funding for health programs and environmental management (for example, USDA funding to repair water systems in rural areas).

Disaster roll out for FEMA funds have been projected by subcategory to account for differences in when funds are spent:

- Individual Assistance from FEMA is assumed to be spent in the immediate aftermath of the storm, with $\sim\!60\%$ already spent in FY2018
- Public Assistance categories A&B and Mission Assignments are used for debris removal and emergency work, and therefore exhausted in early years of the recovery
- FEMA categories C-G and Hazard Mitigation are longer-term funding streams that are spread out over 15 years, based on the latest estimates regarding the time it will take to finalize reconstruction

Where data on obligations and disbursements of FEMA funds are available (i.e., FY2018 and FY2019), the Fiscal Plan estimates actual spending for that fiscal year to be the midpoint between obligations (when funds are officially awarded) and disbursements (when the government is reimbursed).

CDBG funds, per statute, are assumed to be spent over the seven-year period following their approval, with rollout informed by the Puerto Rico Department of Housing's latest available action plans. For private insurance, data shows that just over half has already been spent and 2019 Fiscal Plan assumes the remainder will be spent by the end of FY2020.

The 2019 Fiscal Plan posits that based on how disaster relief funds are spent, these funds will impact the economy in many ways: to build the capital stock of the Island through constructing and repairing buildings or utilities, to directly impact the economy through spurring consumption of goods and services on the Island, or to fund programs and services on the Island. The Plan estimates a different rate of pass-through to the economy for each of these different types of funding as follows:⁸

- A 15.5% pass-through rate is assumed for funding that is used to construct and repair utilities, given the reliance on specialized labor and materials for such projects (e.g., FEMA Category F Public Assistance funding towards constructing public utilities). The rest of this funding flows to the Puerto Rican capital stock and therefore contributes to long-term growth.
- A 23.5% pass-through rate is used for funding that is employed to construct and repair residential, commercial, and school buildings given the ability to rely more on local labor and materials (e.g., repair to WIC facilities damaged by the storm). The rest of this funding flows to the Puerto Rican capital stock and therefore contributes to long-term growth.
- A 23.5% pass-through rate is assumed for funding that is directed towards programs and services (e.g., private insurance payments to reimburse personal auto expenditures) as this funding hits the Puerto Rican economy through the labor associated with importing and transporting. This kind of spending does not contribute to the capital stock on the Island, and therefore does not contribute to long-term growth.
- A 100% pass-through rate is assumed for funding that is used directly and in full to replace income or stimulate spending on goods and services originating on the Island (e.g.,

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⁸ Estimated using local contracts for PREPA, residential construction and school construction. These contracts were estimated to have between 10% and 18% pass-through on the economy, respectively, which was then augmented by 5.5% average spend on transportation and logistics on construction projects, which rely on 100% domestic labor.

disaster nutrition assistance). This kind of spending does not contribute to the capital stock on the Island, and therefore does not contribute to long-term growth

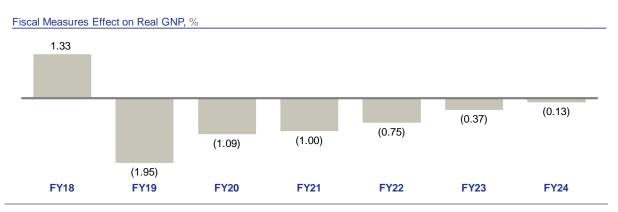
■ CDBG funds put toward cost share are not passed-through to the economy. These funds are put towards the local share of FEMA projects whose value is already accounted for in the respective categories

GNP is projected to rebound in FY2019 in large part due to disaster relief funding, and this has a direct positive influence across most revenue categories.

4.3 Impact of fiscal measures

By optimizing revenue collection and reducing government-wide expenditures, **fiscal** measures seek to streamline and transform the Government of Puerto Rico to a size appropriate for its population. Such policy actions will generate a contractionary impact on the economy in the short term but are necessary to drive fiscal sustainability in the long term. The net effect of these two forces is still significantly positive from a fiscal savings perspective. In addition, the economic contraction estimated from cost-saving measures is limited in the long-term, while such measures are critical for providing long-term financial stability. The macroeconomic impact of the measures is summarized in **Exhibit 9**.

EXHIBIT 9: MACROECONOMIC IMPACT OF FISCAL MEASURES, INCLUSIVE OF DISASTER RELIEF SPENDING



The Fiscal Plan assumes that the fiscal impact of disaster relief spending and fiscal measures is not permanent and is rather unwound over the course of several years. The 2019 Fiscal Plan unwinds these over five years rather than ten years (as in the October 2018 Certified Fiscal Plan), as model-based and econometric studies find that the output effect of an exogenous fiscal shock typically disappears within five years, even if fiscal measures are permanent.⁹

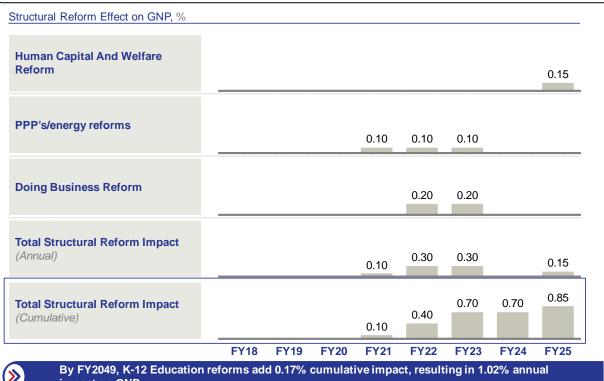
4.4 Impact of structural reforms

The estimated impact of **structural reforms** is based on work done by the International Monetary Fund on labor reforms implemented in Europe (e.g., Spain and Estonia) and South America (e.g., Peru and Colombia), among other jurisdictions; utilities reform in Latin America; and broadly accepted metrics for measuring improvement in the World Bank's Ease of Doing Business Rankings (as well as case examples of growth experienced by countries who have implemented such reforms). Structural reform benchmarks, where possible, come from nations or jurisdictions who face similar constraints to Puerto Rico (e.g., do not have monetary

⁹ Batini, N. Eyraud, L. and Weber, A. "A Simple Method to Compute Fiscal Multipliers", IMF Working Paper WP/14/93, as well as Mountford, A. and Uhlig, H. "What are the Effects of Fiscal Policy Shocks?" <u>Journal of Applied Econometrics</u>, 24: 960-992 (2009) and Jorda, O. and Taylor, A. "The Time for Austerity: Estimating the Average Treatment Effect of Fiscal Policy," <u>Economic Journal</u>, 126: 219-255, February 2015.

policy options and do have high informal labor markets). Labor, energy, and doing business reforms are projected to increase GNP by 0.85% by FY2025 (Exhibit 10). K-12 education reforms add an additional 0.01% annual impact beginning in **FY2033**, resulting in total GNP increase from structural reforms of 1.02% by FY2049. The anticipated timing of the impact of these reforms has been delayed in this Fiscal Plan given the status of the Government's implementation efforts as stipulated by the Fiscal Plan.

EXHIBIT 10: MACROECONOMIC IMPACT OF STRUCTURAL REFORMS



impact on GNP

4.5 Population projections

In the past five years, Puerto Rico's population has trended downward by 1-2% every year as residents have left to seek opportunities elsewhere and birth rates have declined. 10 Prehurricane population forecasts, including the U.S. Census Bureau's official forecast, both projected a worsening population outlook due in large part to Puerto Rico's rapidly aging population. This high average age range results from extremely low age-adjusted birth rates and outmigration of younger people. Indeed, in 2016, Puerto Rico began to experience negative natural population change (a higher number of deaths than births). Hurricanes Irma and Maria have served to compound the problem, adding an additional outflow of people just as natural population decline has set in.

This trend of population decline has accelerated since the storm, as many residents lost houses, jobs and loved ones. While some of these people have returned or will return as the Island rebuilds, population is still projected to decline over the course of the Fiscal Plan period (Exhibit 11) and beyond. While net migration is a larger driver of population change in the short term, this factor is volatile: in the long run, net migration is projected to return to more balanced trends. Natural population change, however, is not guaranteed to rebalance at any point, and births are likely to continue declining, while deaths are projected to rise or stay

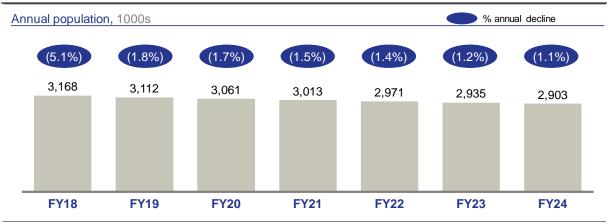
¹⁰ Federal Reserve Bank of St. Louis Economic Research (FRED)

stable. The result is that under the 2019 Fiscal Plan's population forecast, natural population change begins to outweigh migration as a driver of population change by the mid-2020s.

This 2019 Fiscal Plan projects that by FY2024, there will be 8% fewer people living on the Island than in FY2018, and that by FY2049, the drop will grow to 32%. This population projection is lower than that included in the October 2018 Certified Fiscal Plan by 8% in FY2049. These projections reflect two major changes:

- The updated GNP projection, which has less growth in FY2019-FY2030, has caused an accelerated drop in population compared to the October 2018 Certified Fiscal Plan, which widens over time. Relative to the October 2018 Certified Fiscal Plan, the unwinding of the fiscal stimulus will cause GNP to contract more, and thus migration off the Island will be higher, and migration into the Island lower. However, by 2030, this GNP-forecast-driven difference vs. the October 2018 Certified Fiscal Plan will begin to fade. On the whole, from FY2018 to FY2049, changes to forecast GNP account for 48% of the reduction in population throughout the forecast period.
- **Updated population data and model assumptions** including 1) revised migration estimates due to updated air traffic statistics for recent years, 2) revised demographic makeup of migrants and fertility from latest available Puerto Rico Community Survey data, and 3) updated fertility rates based on the 2017 Community Survey and provisional monthly data. The updated data resulted in a lower long-term fertility outlook, with a slower return to nearer-replacement-rate fertility. The data changes account for 52% of the reduction in population from FY2018 to FY2049, and in FY2049 they account for 72% of the change. The impact of reduced fertility on population forecasts grows over time and is relatively insensitive to changed economic forecasts. However, population revisions due to changed population data and model assumptions have a smaller effect than revisions due to GNP changes until the mid-2030s.

EXHIBIT 11: PROJECTED POPULATION CHANGE



Chapter 5. 2019 FISCAL PLAN FINANCIAL PROJECTIONS

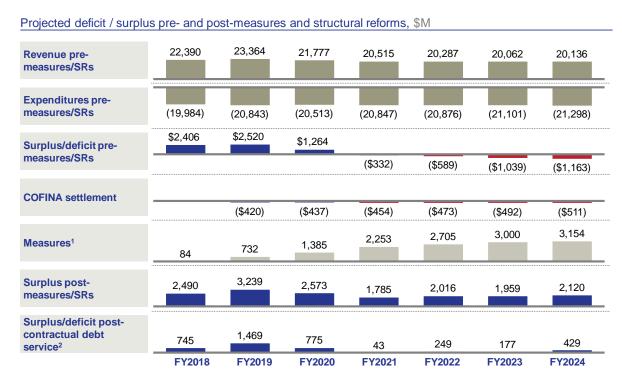
Before measures and structural reforms ("baseline forecast"), and after incorporation of the COFINA Title III Plan of Adjustment which pledges an annual portion of the SUT to COFINA creditors starting at \$420.2 million in FY2019 and increasing to \$992.5 million by FY2041, there is a pre-contractual debt service surplus in FY2018-FY2020. This surplus is not projected to continue, as federal disaster relief funding slows down, Supplemental Medicaid funding phases out, Act 154 and Non-Resident Withholding revenues decline, and healthcare

expenditures rise. Without major Government action, the Island would suffer an annual primary deficit starting in FY2021.

The fiscal measures and structural reforms contained in the 2019 Fiscal Plan help transform the deficit into a surplus for a significant portion of the 2019 Fiscal Plan. Fiscal measures will drive ~\$13.6 billion in savings and extra revenue over FY2019-FY2024 and structural reforms will drive a cumulative 1.02% increase in growth by FY2049. However, even after fiscal measures and structural reforms and before contractual debt service, there is an annual deficit reflected in the projection starting in FY2038, in large part due to insufficient structural reforms, including restrictive labor policies that prevent higher growth and lack of progress in rolling out the NAP work requirement and Ease of Doing Business reforms. After contractual debt service, the surplus seen in FY2019-FY2024 drops significantly (Exhibit 12) and annual deficits begin in FY2027.

Projections for FY2025 onwards are included in the next chapter.

EXHIBIT 12: PROJECTED DEFICIT / SURPLUS PRE- AND POST-MEASURES AND STRUCTURAL REFORMS



¹ Measures have a contractionary effect on economy, thus pre-measures revenues less pre-measures expenses plus measures does not equal post-measures and structural reforms surplus 2 Debt service based on prepetition contractual debt obligations. Presented for illustrative purposes only and does not represent anticipated future payments on restructured debt. Excludes HTA, UPR, PREPA, PRASA, Children's Trust, and COFINA.

5.1 Baseline revenue forecast

Major revenue streams (**Exhibit 13**) include non-export sector General Fund revenues (including individual, corporate, and sales and use taxes) and export sector revenues (including Act 154 excise taxes paid by multinationals operating on the Island, and Non-Resident Withholdings), as well as federal funding.

Personal income							2,195
taxes	1,960	2,125	2,141	2,153	2,195	2,201	
Corporate							1,997
income taxes	1,776	2,175	2,202	2,122	2,018	2,020	
Sales and use							2,252
tax²	2,522	2,313	2,275	2,254	2,274	2,264	
Act 154							1.199
AUT 104	1,915	1,915	1,831	1,691	1,447	1,199	1,100
Non-resident	607	CEO	CEE	CEO	640	F70	570
withholdings	637	653	655	653	618	572	573
Other ³	4.570	4.504	4.450	4.000	4.000	4.000	4.040
Other	4,573	4,564	4,156	4,232	4,223	4,208	4,242
IFCU & CW SRF							2,714
Revenue ⁴	2,447	2,490	2,700	2,645	2,685	2,703	2,717
Fadaral Foundas							
Federal Funds ⁵	6,560	7,128	5,815	4,765	4,827	4,893	4,962
Total	22,390	23,364	21,777	20,515	20,287	20,062	20,136
	FY18	FY19	FY20	FY21	FY22	FY23	FY24

¹ Includes revenue neutral adjustments to PIT, CIT, SUT due to Act 2018-257 2 Sales and use tax (SUT) reflects collections after payout of the COFINA settlement

5.1.1 Non-export sector General Fund revenue projections

In the midst of a decline in economic activity from FY2017 to FY2018, income tax collections proved more resilient than the economy as a whole. A close analysis of the underlying data revealed that tax collections in FY2018 were buoyed by tax receipts from mainland corporations and individuals remitting taxes in Puerto Rico related to recovery-related activities. This trend has been sustained into FY2019.

Individual income taxes: Individual income taxes are highly concentrated, with 78.2% of revenues coming from the 8.7% of returns reporting income above \$60,000 in FY2018¹¹. Based on aggregated Hacienda data around new individual taxpayers associated with reconstruction-related industries, and outperformance of revenues relative to GNP, the 2019 Fiscal Plan estimates that \$142 million of these revenues in FY2018 were due to recovery related activity, either from Puerto Rican residents entering the formal economy or from off-Island workers attached to specific reconstruction projects.

Corporate income taxes: There is also concentration in tax receipts among the largest corporations operating in Puerto Rico (e.g., ~29% of corporate income taxes are paid by 20 corporate taxpayers). 12 Based on aggregated data from Hacienda, and outperformance of revenues relative to GNP, the 2019 Fiscal Plan estimates that \$277 million in corporate tax revenues resulted from recovery-related economic activity in FY2018, due to the influx of corporate activity spurred by reconstruction funding, mainland-based firms entering the Island economy, and Puerto Rican firms receiving new business. The 2019 Fiscal Plan further projects a cyclical boost in corporate tax receipts during the three years of reconstruction and recovery-related economic growth (FY2019-FY2021), which is supported by Hacienda data

^{3 &#}x27;Other' revenues include cigarette, rum, motor vehicles, alcoholic beverages, and other GF taxes, PREPA loan repayment, third party ASES receipts, and other tax/non-tax revenues; exclude adjustments for revenue gross up
4 IFCU and CW SRF revenue were previously included in 'Other' revenues; for IFCUs, it includes all fund types (Federal Funds, General Funds, and SRF)
5 Includes Federal Funds of Commonwealth agencies; excludes Independently Forecasted Component Units (IFCUs)

¹¹ Hacienda historical reports as of April 2018

¹² Hacienda historical reports as of April 2018

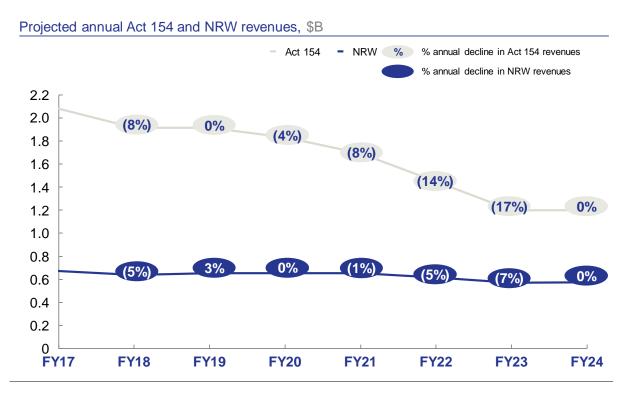
showing corporate tax receipts for the first 9 months of FY2019 \$267 million over the levels implied by the fiscal plan certified in October 2018.

Sales and use taxes (SUT): Like corporate and personal income taxes, SUT revenues in FY2018 were likely boosted by the increased economic activity resulting from the post-disaster reconstruction process (including, through replacement of lost inventory), as well as enhanced compliance by those firms less impacted by the storm. The 2019 Fiscal Plan estimates about a \$58 million FY2018 impact from those recovery related sources. Following the COFINA Title III Plan of Adjustment, a portion of SUT collections will be used to pay the settlement going forward. This portion reaches about \$1 billion annually starting in FY2041.

Other General Fund Revenue (Motor Vehicles, Alcoholic Beverages, Cigarettes): In FY2018, other General Fund revenues were impacted differently by the economic activity following the storm. Of particular note, there was a surge in motor vehicle revenue in FY2018 which has continued into FY 2019, as residents replace motor vehicles in the wake of the storm.

Export sector revenue projections: Act 154 and Non-Resident Withholding (NRW) tax revenues are concentrated in a small number of multinational corporations. From FY2017 to FY2023, Hacienda estimates that ~42% of Act 154 and 12% of NRW revenues will erode (**Exhibit 14**) due to due to U.S. federal tax reform (reducing Puerto Rico's attractiveness as a low tax jurisdiction for multinationals), global supply chain diversification, and patent expirations. Act 154 revenue decline has been delayed to FY2020 based on actual FY2019 collections as of March 2019. There is no new information indicating that the previously projected trendline will change by FY2024 or FY2025.

EXHIBIT 14: PROJECTED ACT 154 AND NON-RESIDENT WITHHOLDING (NRW) REVENUES



The 2019 Fiscal Plan revenue forecast includes the revenue effects of the changes to the tax code of Puerto Rico signed into law in December 2018. While the legislation includes numerous changes, it is overall revenue neutral, with all tax reductions paid for by offsetting revenue increases.

5.1.2 Medicaid funding

Medicaid costs are typically funded primarily by the Commonwealth, as there is a cap on available federal funding. Typical annual federal funding streams for the Commonwealth are the following, projected based on current law and statutory growth rates:

- Standard annual federal Medicaid funding. Although Puerto Rico has a 55% federal matching assistance percentage (FMAP), the amount of annual federal funding received under Section 1108 is capped each year. For FY2018, this funding stream was capped at \$359.2 million, and though the cap grows each year at Medical CPI-U, it does not keep pace with healthcare expenditure growth. 13 Each year, a portion of these funds are used directly by the Department of Health and therefore not available to cover premiums expenses. These primary annual disbursements of ~\$100M go to Federally Qualified Health Centers (Centros 330, "FQHC") and Medicaid Operations.
- Children's Health Insurance Program (CHIP) funding. CHIP funding is not subject to a federal cap. It also has a higher FMAP at 91.5%, though this federal cost share is projected to decrease in FY2020 with the expiration of the Affordable Care Act's temporary increase. In FY2018, this amount totaled \$172 million.

In FY2018 and FY2019, the available share of federal funds is much higher due to several sources. Additional federal funding is provided in FY2018 by **remaining Affordable Care Act (ACA)** funds (approximately \$403 million) and supplemental federal funding of \$296 million from the 2017 Omnibus Appropriations Act.

In addition, in February 2018 the Bipartisan Budget Act of 2018 (BBA) allocated a supplemental \$4.8 billion of federal funding to Puerto Rico Medicaid for use between January 2018 and September 2019. Per guidance from the Centers for Medicare and Medicaid Services, this funding is estimated to apply only as a reimbursement for eligible populations (i.e., federally funded Medicaid expenditures). The Puerto Rico Health Insurance Administration (ASES) will spend as much of the allocation as possible before drawing down any remaining ACA funds, which can resume use from September 30, 2019 until expiration in December 31, 2019. Depending on the exact costs incurred in eligible spending buckets, ASES will be able to absorb approximately \$4.5 billion of the allocated funding for core Medicaid expenditures. ¹⁴ It will continue to receive its annual CHIP, ¹⁵ FQHC, and DOH Medicaid operations funding.

Exhibit 15 outlines expected Medicaid federal fund receipts. Starting in FY2020, Supplemental funding is projected to phase out. This funding cliff indicates the imperative and urgent need to implement cost-saving measures to reduce long-term Medicaid costs (Medicaid expenditures are discussed in detail in *Section 5.2.4*). All projections are based exclusively on legislation that is currently in force.

14 Current assumption is that only federally funded Medicaid beneficiaries (excluding all CHIP and Commonwealth members) are eligible for reimbursement using BBA funds. These beneficiaries represent approximately 88% of total MCO disbursements, 100% of Platino premiums, all administrative costs, and less any cost-saving measures that reduce reimbursable spend during the timeframe

funding cap will not keep up with actual increases in expenditures

According to §1108(g) of the Social Security Act., from 2011 to 2016, the cap grows by the medical component of CPI-U as reported by BLS each year. From FY2011-FY2016, this growth averaged 2.9%. This inflation rate differs from the healthcare inflation index for Medicaid and Medicare used elsewhere in the 2019 Fiscal Plan (4.5% to 4.9% from FY2018-FY2023, increasing to 5.1% in FY2038 and subsequently declining to 4.85% by FY2049). Instead, the medical component of CPI-U includes other factors that lower the inflation rate by approximately 3-5 percentage-points, meaning the increase in the federal

¹⁵ CHIP funding will continue at 91.5% FMAP until expiration of the ACA enhanced FMAP in September 2019. At that point, FMAP will return to 68.5% pre-ACA level, according to §2101(a) of the Affordable Care Act which amended §2105(b) of the Social Security Act

EXHIBIT 15: BASELINE FEDERAL FUNDS RECEIPT PROJECTIONS

Medicaid Federal funding sources, \$M 2,820 Affordable Care Act and One-time Omnibus Funding from FY18 171⁻ Net Federal Block Grants (Medicaid, CHIP) 2,301 BBA 2018 Supplemental Federal Medicaid Funding 699 1,526 403 2,649 434 430 475 460 1,199 446 432 662 475 432 446 460 **FY18 FY19 FY20 FY21 FY22 FY23 FY24**

5.1.3 Other federal funding

In addition to Medicaid funding, Puerto Rico receives other federal funds on a regular basis. (These are not to be confused with disaster relief funds, which are directly tied to post-storm reconstruction activity.) These funds typically cover both social benefits and operational expenditures. In the 2019 Fiscal Plan, these funds have been modeled based on what types of costs they cover (e.g., benefits or operations) as well as the statutory formula that defines the size of Puerto Rico's allotment. For example, while TANF funds are typically pass-through (e.g., none of these funds go to operational costs), some Title I education funds are used for operational purposes (e.g., teachers' salaries, school supplies for programs for students with special needs, etc.). For the former, federal fund inflows and outflows mirror each other (as benefit needs decline, so do funds). For the latter, though inflows may decline, it does not necessarily mean expenditures decline as well — as expenditures are based on operations, not on benefits formulas. Meanwhile, while Head Start funds are allocated from the Federal Government based on the number of children living in poverty, NAP funds are provided through a block grant that is capped. The former, therefore, should change by population, while the latter should only grow with inflation, regardless of population changes.

5.1.4 Special Revenue Funds

Commonwealth agency Special Revenue Fund (SRF) revenues: The Commonwealth collects a significant portion of its revenues through Special Revenue Funds, which are funded from, among other sources, tax revenues assigned by law, fees and charges for services by agencies, dividends from public corporations and financing proceeds. Government tracking and reporting of these SRF revenues, associated expenses, and resulting surpluses or deficits has historically been incomplete and inconsistent. In this version of the Fiscal Plan, due to data recently made available by the Commonwealth (FY2018 actuals, FY2019 estimates, and FY2020 projections, as vetted through the budget process), the baseline level of SRF revenues of Commonwealth agencies (excluding IFCUs) has been updated in this Fiscal Plan. This Fiscal Plan does not further detail SRF by type (special state funds, own revenues and other revenues). Future budget and fiscal plan processes will aim to further clarify Special Revenue Funds and apply controls to ensure transparency and accountability for these revenues. SRF revenues are forecast to grow by inflation from the FY2020 baseline.

Independently Forecasted Component Unit (IFCU) revenues: The Commonwealth contains thirteen Independently Forecasted Component Units, which range from public

corporations (e.g., the State Insurance Fund Corporation) to public hospitals (e.g., the Cardio Center). These entities are mostly funded by Special Revenue Funds and may also receive General Fund appropriations. Through the FY2020 budget process, the Oversight Board was able to gain more insight into the specific revenue streams for these entities. As such, this version of the Fiscal Plan includes growth assumptions by line item for each IFCU rather than one aggregate growth rate across all revenue streams and IFCUs. While most IFCU revenues are projected using GNP, given the unique nature of each IFCU, certain revenue streams are grown by other factors, such as inflation, population, or as governed by legislation.

Muncipality and Public Corporation Paygo receipts: The 2019 Fiscal Plan includes receipts from municipalities and public corporations that participate in ERS to cover Paygo expenditures covered by the Commonwealth. The Commonwealth shall be reimbursed for these payments and will take action if these contributions are not received (e.g., will withhold payments for utilities, appropriations).

FAM: The Municipal Administration Fund (FAM) collects 0.5% of the SUT which is distributed into three funds: (1) 0.2% to the Municipal Development Fund; (2) 0.2% to the Municipal Redemption Fund; and (3) 0.1% to the Municipal Improvement Fund (referred to as the FMM). Pursuant to Section 4050.09 of Act 1-2011 the FMM are to be distributed through annual legislation and appropriated for select capital works and improvement projects for the municipalities including improvements to schools (e.g., public housing, schools). The legislature passes resolutions each year to allocate the FMM. These resolutions must be consistent with the 2019 Fiscal Plan and the applicable special revenue funds included in the Certified Budget.

5.1.5 Gross up for tax credits

Gross up of revenues to reflect potential revenues without payment of tax incentives: In addition to offering preferential tax rates, tax exemptions, tax abatements, and cash grants, the Government of Puerto Rico incurs hundreds of millions of dollars in tax credits to corporations and individuals each year. Some of these tax credits function as entitlement programs: any business that meets the requirements set forth in law is entitled to the benefit. Other tax credits give government officials considerable discretion on which projects will receive incentives. Many of these tax credits are intended to pursue certain policy goals such as stimulating employment, stimulating economic activity and economic development, encouraging investment and protecting local industries. Unlike traditional expenditures, however, tax credits are not incurred in a transparent fashion, and, with only a few exceptions, are currently uncapped in the aggregate amount of benefits conveyed. The issuance of tax credits also tends to be done in an ad hoc manner, with unclear economic justification for the costs incurred. This leads to an unpredictable, and potentially costly, foregone revenue stream each year.

Uncapped and unpredictable issuance of tax expenditures can have a materially negative fiscal impact. Several states have faced challenges with unexpected levels of expense from tax expenditures, such as Michigan (the Michigan Economic Growth Authority tax credits), Louisiana (tax credit for horizontal natural gas drilling), and New York ("brownfields" tax credits). The examples from the above states are not uncommon and they reinforce the uncertainty and risk associated with the establishment of tax credits.

Policy makers in Puerto Rico must understand both the budget implications of current and proposed tax expenditures and be able to manage the size of tax incentives by setting limits on their annual cost and eliminating tax credits with negative returns. The issuance of reliable cost estimates, including a detailed analysis of the budget implications from each tax incentive, and annual cost controls will help Puerto Rico avoid unexpected negative outcomes. Otherwise, the government will remain powerless to manage the cost of these incentives and keep the incentives from growing beyond affordable levels.

Recognizing the importance of this question to the fiscal sustainability of Puerto Rico, the 2019 Fiscal Plan includes a forecast of gross revenues inclusive of the value of tax credits, along with their associated expenditures. The 2019 Fiscal Plan includes a forecast of gross revenues based on the historical level of the certain tax credits claimed on income tax filings for individual filers, regular corporation filers, and incentive tax filers, as provided by Hacienda. As shown in **Exhibit 16**, over the past eight tax years (2010-2017), tax credits claimed across all tax filers averaged \$247 million annually. The Oversight Board requires all reporting going forward to include monthly and quarterly reports to include gross revenues, tax credits claimed, and the net revenues received for the period of the report.

EXHIBIT 16: TAX CREDITS BY YEAR

Projection	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
Regular Corporations	94	47	87	84	76	65	59	32
Incentive Corporations	135	147	133	158	116	78	70	56
Individuals	59	38	90	69	65	66	61	88
Total Tax Credits Claimed	288	231	309	310	258	209	190	176
8-Year Average								
SOURCE: Hacienda								

The government should adopt a transparent limit to the amount of tax credits issued and claimed at an amount below \$247 million, for example by capping the notional amount, number of companies and individuals that can claim credits annually, the inclusion of sunset provisions, and time bound clauses upon which each tax credit will expire. This is similar to the approach other states have taken to limit the use or issuance of tax expenditures, including Arizona, California, Florida, Illinois, Massachusetts, Minnesota, New York, Ohio, and Pennsylvania. This limit is separate from the ~\$340 million of cash grants that corporations and individuals also receive, which will be captured in Certified Budgets going forward. Future fiscal plans must also be expanded to include limitations on foregone revenues due to preferential tax rates and exemptions, including municipal exemptions.

These forecasts must be maintained and updated by leveraging the work that Hacienda has undertaken to produce and maintain a more comprehensive measurement of tax expenditures over time through the annual Tax Expenditures Report. The Government has also taken initial steps to provide transparency around, and control these expenditures through, its proposed reforms to the Incentives Code. Only by explicitly appropriating money for incentives in the Certified Budget and by setting a limit on the amount that can be spent each year, will tax incentives start to function more like regular spending programs, with the government retaining control over the cost, and less like open-ended commitments.

5.1.6 Gross up for COFIM receipts

COFIM is the public corporation that collects the 1% Municipal Sales and Use Tax (SUT) established by law, for certain municipalities. The 2019 Fiscal Plan includes projections of this 1% revenue stream, along with exactly offsetting expenses. COFIM is not an entity that receives appropriations from the General Fund but relies solely on municipal SUT.

5.2 Baseline expenditure forecast

Over the next five years, baseline expenditures are set to increase relative to FY2018 due to inflation and increases in Medicaid costs (Exhibit 17).

EXHIBIT 17: MAJOR EXPENDITURE CATEGORIES PRE-MEASURES AND STRUCTURAL **REFORMS**

Payroll (non-federally funded)	2,996	2,961	2,970	3,002	3,037	3,081	3,126
Direct operating expenditures (non- federally funded) ¹	1,508	1,736	1,617	1,659	1,676	1,707	1,732
CW appropriations ²	1,274	1,246	1,134	1,348	1,358	1,346	1,356
Commonwealth Medicaid expenditures	120	0	992	2,124	2,199	2,283	2,375
Pension expenditures	2,254	2,260	2,398	2,381	2,334	2,325	2,321
Other ³	2,728	2,736	2,599	2,482	2,325	2,298	2,210
IFCU & CW SRF Expenditures ⁴	2,544	2,816	2,969	3,056	3,083	3,122	3,164
Federally funded expenditures ⁵	6,560	7,089	5,835	4,794	4,864	4,938	5,014
Total	19,984	20,843	20,513	20,847	20,876	21,101	21,298
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024

5.2.1 General fund payroll and non-payroll operating expenditures

Payroll expenditures: Despite progress made through the FY2020 budget process, consistent granular payroll data continues to be a challenge for the government. FY2018 payroll numbers reflect actual expenditures where available and the Certified Budget in cases where actual data was not available (adjusted to reflect reapportionments among agencies). FY2019 is assumed to be equal to FY2018 given the Fiscal Plan Compliance Act, which enacted a payroll freeze with the exception of certain agency-specific adjustments. Beginning in FY2020, base payroll is assumed to grow by Puerto Rican inflation. Any reduction to baseline payroll expenditure projections from attrition, absenteeism or workforce reductions will be captured through fiscal measures. Further, whereas the payroll freeze is currently planned to discontinue after FY2019 (which is reflected in the baseline), the extension of this payroll freeze is proposed by the 2019 Fiscal Plan and will therefore be counted as a measure.

Non-payroll operating expenditures: Non-personnel operating expenditures are based on the FY2018 budgeted levels, with reapportionments included where necessary. Like payroll expenditures, non-personnel operating expenditures are projected to be frozen at FY2018 levels in FY2019, with costs growing by Puerto Rican inflation beginning in FY2020.

costs; excludes adjustments for expenditure gross up
4 IFCU and CW SRF expenditures were previously included in 'Other' expenditures; for IFCUs, it includes all fund types (Federal Funds, General Funds, and SRF)
5 Includes Rederal funds for parenting expenditures; Medicaid, and social programs; excludes Independently Forecasted Component Units

5.2.2 Special Revenue Funds

Commonwealth agency Special Revenue Fund (SRF) operational expenditures: The Commonwealth funds a significant portion of its expenses through the use of Special Revenue Funds and has not reported on these expenses transparently in a consistent manner. Given that SRF revenues and expenditures are not part of the General Fund for budgeting purposes, they are not included in the General Fund budget resolutions approved by the Legislature. However, the Oversight Board has certified SRF expenditures starting with the FY2019 budget process, with the objective of applying controls and reporting requirements to ensure transparency and accountability for these revenues and expenditures. Government data recently provided shows significant variance year to year in the level of SRF expenditures and lacks granularity to review historical payroll and non-payroll trends. The Government's reporting on actual spend of SRF is also lacking. In this version of the 2019 Fiscal Plan, due to data recently made available by the Commonwealth (FY2018 actuals, FY2019 estimates, and FY2020 projections, as vetted through the budget process), the baseline level of SRF expenses of Commonwealth agencies (excluding IFCUs) has been updated. Given the mandate of the Office of the CFO to place controls on SRF expenditures, expenses are forecasted to be equal to the estimated revenues in each year. The level of SRF expenditure is forecast to grow by inflation from the FY2020 baseline, although there may be variance year to year from onetime SRF. Such increases will be controlled through the annual budget and within-year SRF increase request processes. Future budget and fiscal plan processes will aim to derive more granularity in these expenditures.

Independently Forecasted Component Unit (IFCU) operational expenditures: Similar to IFCU revenues, based on new data received during the FY2020 budget process, IFCU projections have been updated to include line item specific projections per IFCU rather than one aggregate growth rate for expenditures across all entities. Most IFCU payroll and non-payroll expenses grow by inflation, with exceptions for certain expense categories (e.g., healthcare costs grow with medical inflation, variable costs that grow in line with revenues).

The baseline expenditures include **municipality and public corporation PayGo**, **COFIM**, **and FAM expenditures**, including all of the conditions outlined in *Section 5.1.4*.

5.2.3 Other federal funding

The majority of federal funds received by the Commonwealth are passed through to residents directly in the form of social benefits (e.g., TANF, WIC), but federal funds are also used to cover operating expenditures in many agencies. Expenditures related to pass-through federal funds are set equal to the associated revenue stream. Baseline expenditures related to operating expenditures are set based on the FY2018 federal funds budget reported by the Government and grow with inflation (and in some cases population). In the case of Title I, revenues will grow with growth in total federal funding - presumed to track US inflation - but decline with decreasing enrollment, which is the most salient determinant of Puerto Rico's annual allocation. At the same time, the 2019 Fiscal Plan assumes fixed costs associated with providing these services may not decline at the same rate (given Commonwealth historical behavior of maintaining infrastructure such as schools and program staff despite population decline).

5.2.4 Medicaid expenditures

Medicaid costs are projected to reach nearly \$3.2 billion annually by FY2024 (**Exhibit 18**). These costs are primarily driven by the weighted average cost per member per month (PMPM) multiplied by the estimated number of people enrolled in the Medicaid (federal and Commonwealth-qualified), CHIP, and Platino dual-eligible programs. Projections also include

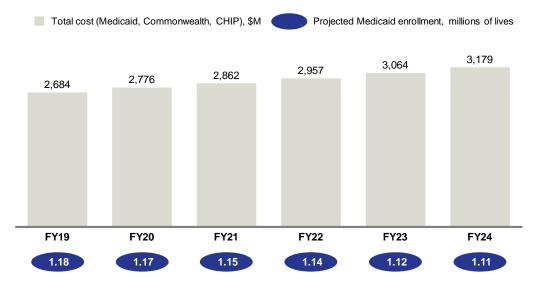
other health-related expenditures (e.g., HIV and pulmonary programs). These costs are exclusive of non-medical administrative costs to ASES and the Department of Health.

PMPM costs are projected to grow at 4.5% p.a. in FY2019 and increase to an annual growth rate of 4.9% in FY2024. This rate tracks pre-hurricane growth in Puerto Rico after the Island switched to a fully managed care model in 2015. In the long term, costs increase according to an age-mix adjusted PMPM growth rate (see *Section 6.1*).

Enrollment rates are primarily tied to overall population decline. The large drop-off between FY2018 and F20Y19 reflects the end to the auto re-enrollment period that was put in place after Hurricane Maria, a period during which many enrollees either left the Island or ceased to qualify for coverage under current thresholds. The baseline assumes a return to prehurricane rates of enrollment by FY2020, which represents a change from the previous Fiscal Plan as current enrollment data has indicated a drop due to the end of the "auto-enroll" program that was in place in FY2019.

EXHIBIT 18: PROJECTIONS FOR MEDICAID AND CHIP BASELINE COST AND ENROLLMENT (NOT INCLUDING PLATINO)





Note: Only includes Medicaid (CHIP, Commonwealth- and federally-funded). Excludes Platino dual-eligible, as well as non-direct premium costs (e.g., HIV/PDP, Health Insurance Provider Fee, Air Ambulance, MC21 Administrative Fee, Super Utilizers, and Pulmonary).

Other Commonwealth Medicaid expenditures, which include HIV/PDP, Air Ambulance, MC21 administrative fee, Super Utilizers, and Pulmonary, among others, are projected to grow at the rate of Puerto Rico inflation. Separate from these costs is the Health Insurance Provider fee that also must be paid annually per federal law unless Congress continues to impose a moratorium. It is calculated each year by the Federal Government and estimated here to be 1.80% of total premiums. ¹⁶

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¹⁶ See sec 4003 of FOURTH CONTINUING APPROPRIATIONS FOR FISCAL YEAR 2018 at https://www.congress.gov/115/plaws/publ120/PLAW-115publ120.pdf See sec 4003. Based on actuarial estimates provided by ASES

Platino dual-eligible program expenditures were estimated using a consistent \$10 PMPM over FY2019-FY2023 representing payment for wrap-around services supplementing main Medicare coverage (from FY2024 this cost grows with the long-term healthcare growth rate). Enrollment is projected to be affected similarly to Medicaid enrollment, though with less fluctuation in actual proportion of population enrolled because of auto re-enrollment.¹⁷ Platino costs are expected to total nearly \$32 million in FY2019, decline slightly to \$31 million by FY2024, and then grow again.

5.2.5 Commonwealth pension expenditures

Pension costs: Projections rely on demographic and actuarial estimations for Employees' Retirement System (ERS), Teachers' Retirement System (TRS), and Judicial Retirement System (JRS) populations and benefit obligations. From FY2018-FY2024, costs are projected to grow slowly but remain approximately \$2.3 billion. Since FY2018, pension benefits for all plans have been paid on a pay-as-you-go basis.

5.2.6 Appropriations

Municipalities: Baseline municipal appropriations are projected to remain constant at ~\$220 million from FY2018-FY2024, with the exception of a *one-time* allotment to municipalities as a result of Hurricanes Irma and Maria, which took place in FY2018 for the amount of \$78 million.

The University of Puerto Rico (UPR): The UPR appropriation baseline is \$678 million in FY2018 and remains ~\$717 million from FY2019-FY2024, inclusive of approximately \$42 million in capital expenditures for UPR.

The Highways and Transportation Authority (HTA): The Commonwealth provides the HTA with an average annual appropriation of ~\$230 million which increases to \$279 million annually from FY2023 on for capital expenditures and other costs. In FY2020, the Commonwealth should reduce the appropriation by \$73 million on a one-time basis in FY2020 given HTA's inability to disburse its capital expenditure budgeted funds in FY2019¹⁸ resulting in an accumulated cash balance of \$338 million. The Fiscal Plan encourages HTA to prioritize and accelerate project delivery, focusing on the projects of utmost strategic importance to the residents of Puerto Rico.

5.2.7 Other operating & capital expenditures

Utilities: For FY2018, utility costs are based on the historical cost of government payments for utilities-related costs. In FY2019, the Fiscal Plan uses the estimated billings from PREPA and PRASA on an agency level, which are then projected to grow by power and water rate increases over the period of FY2020-FY2024. Meanwhile, as of May 2019, Commonwealth agencies and public corporations owe \sim \$150 million to PREPA and PRASA for past services provided . The Government must work with all agencies to ensure any outstanding accounts receivable are repaid to PREPA and PRASA before the end of FY2019.

Insurance (PRIMAS): The Commonwealth bears costs related to insurance premiums (e.g., property insurance, liability insurance). Government reporting on these costs has not been transparent or consistent over time (e.g., not all agencies report these costs independently of other operating expenses, reporting is not consolidated across General Fund and Special Revenue Funds). The Government reports that insurance costs have increased from FY2018

¹⁷ Projected based on a smaller observed spike in actual enrollment from pre- to post-Maria relative to Medicaid spike

¹⁸ As of April FY2019, HTA reported that it had only delivered 18% of budgeted federal capital expenditures and 31% of state budgeted capital expenditures

to FY2020 due to Hurricanes Maria and Irma. Given the potential risk of future hurricanes, the baseline expenses related to insurance have been increased, but the Government must improve reporting on these expenses going forward so that they can be managed appropriately.

Capital expenditures: Centrally funded General Fund maintenance and capital expenditures of the Commonwealth (excluding PREPA, PRASA, HTA self-funded capital expenditures and one-time transfers) are expected to grow by inflation from a baseline of ~\$400 million in FY2018. Of this, an ~\$125 million will be appropriated annually to HTA and UPR (as part of their current appropriations), with the remaining ~\$275 million for use by the Commonwealth. HTA's capital expenditure funds will be used to support reconstruction, maintenance, traffic reduction, completion of the strategic network, and P3-related expenditures. UPR's capital expenditure funds will support, among other projects, Phase III of the large Molecular Sciences building, building restoration at Rio Piedras, and the development of a major campus building at Mayagüez. The 2019 Fiscal Plan includes annual Special Revenue Fund capital expenditures of \$85 million, which will largely go to fund improvements to infrastructure (e.g., dock and airport repairs) and correctional facilities.

5.2.8 Reconstruction and restructuring related expenditures

Cost share for disaster relief funding: Federal funds for FEMA's public assistance and hazard mitigation programs typically require a local match from the entity receiving them (anywhere from 10-25% of funds). In the case of Puerto Rico, the 2019 Fiscal Plan projects that the Commonwealth will need to cover an estimated ~10% of federal public assistance funds, amounting to \$2.4 billion from FY2018-FY2032. The instrumentalities will shoulder a further \$2.3 billion in total cost match expenditures during the same period. A portion of the Commonwealth and instrumentalities cost match expenditures are projected to be covered by CDBG funds from FY2020 to FY2025, which amounts to \$2.4 billion. Meanwhile, the Fiscal Plan maintains \$190 million in Commonwealth cost share for FY2019 given the lack of CDBG funds available, and for FY2020-2025, includes \$100 million in reserve funds in the event that less CDBG funding is available than is currently projected. If these funds are unspent at any time, they would accumulate and be utilized as part of an emergency reserve fund going forward.

PROMESA related costs: Commonwealth PROMESA-related expenditures are projected to be \$1.5 billion for FY2018 to FY2024, comprised of all professional fees including those of the Unsecured Creditors' Committee, AAFAF, and the Oversight Board (approximately \$1.1 billion from FY2018-2024), as well as funding for the Oversight Board (\$352 million over FY2018-2023). The estimate for professional fees was developed, in conjunction with the Government, by analyzing FY2018 and FY2019 run-rate billings based on available information and soliciting input from certain professionals. Fees were benchmarked versus comparable restructuring situations that yield an average professional-fee-to-funded-debt ratio of 1.89% relative to 1.68% projected for the Commonwealth (**Exhibit 19**).

EXHIBIT 19: PROJECTED PROFESSIONAL FEES RELATIVE TO OTHER MAJOR RESTRUCTURINGS

	Date filed	Outstanding debt, USD	Total fees and expenses, USD	Fees to funded debt, %	
City of Detroit, Michigan	Jul. 2013	\$20,000,000,000	\$177,910,000	0.89%	
Residential Capital, LLC	May-12	\$15,000,000,000	\$409,321,308	2.73%	
Sabine Oil & Gas Corp.	Jul. 2015	\$2,800,000,000	\$78,553,223	2.81%	
Caesars Entertainment Operating Company	Jan. 2015	\$18,000,000,000	\$258,278,005	1.43%	Summary Statistics
Lehman Brothers Holdings Inc.	Sep. 2008	\$613,000,000,000	\$956,957,469	0.16%	Avg. 1.89%
Lyondell Chemical Company	Jan. 2009	\$22,000,000,000	\$205,932,292	0.94%	Max 3.56% Min 0.16%
American Airlines	Nov. 2011	\$11,000,000,000	\$391,637,858	3.56%	Med 1.68%
Washington Mutual, Inc.	Sep. 2008	\$8,000,000,000	\$271,085,213	3.39%	
Edison Mission Energy	Dec. 2012	\$5,000,000,000	\$96,244,628	1.92%	
Energy Future Holdings Corp.	Apr. 2014	\$40,000,000,000	\$450,110,233	1.13%	
Puerto Rico	2017	\$64,000,000,000	\$1,075,000,000	1.68%	_

Emergency reserve: The Commonwealth must establish an emergency reserve of \$1.3 billion, or ~2.0% of FY2018 GNP, by reserving \$130 million per year for 10 years starting in FY2019. The methodology supporting this reserve is informed by guidance provided to other Caribbean islands by the International Monetary Fund in defining an adequate emergency reserve (2-4% of GNP, accumulated at 0.5% per year). Pestrictions on the use of this fund must ensure that it is a true emergency reserve.

5.2.9 Gross-ups for tax credits and COFIM

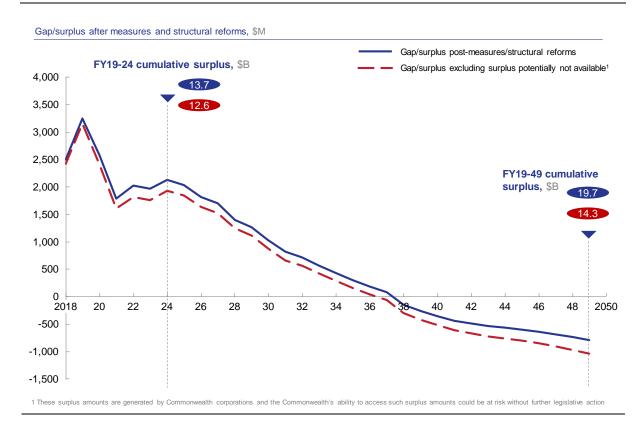
For each of the gross-up revenue items included in *Section 5.1.5* and *Section 5.1.6* an equivalent expenditure is included in the baseline expense forecast.

5.3 Surplus potentially not available for Commonwealth

The 2019 Fiscal Plan financial projections show the surplus generated by all entities covered by the Commonwealth Fiscal Plan. However, some of the surplus is generated by Commonwealth public corporations, and the Commonwealth's ability to access such surplus amounts could be at risk without further legislative action. In particular, the surplus generated by the State Insurance Fund Corporation (SIFC) and the Cardiovascular Center Corporation of Puerto Rico and the Caribbean may be inaccessible. As such, the 2019 Fiscal Plan also represents what the surplus would be should these funds be inaccessible (**Exhibit 20**).

¹⁹ IMF Bahamas Article IV report published March 22, 2018

EXHIBIT 20: SURPLUS POTENTIALLY NOT AVAILABLE FOR COMMONWEALTH



Chapter 6. LONG-TERM PROJECTIONS AND DEBT SUSTAINABILITY ANALYSIS (DSA)

While the 2019 Fiscal Plan emphasizes actions to be taken in the period from FY2019-FY2024, the Oversight Board's ultimate goal is to put Puerto Rico on a path towards long-term fiscal balance. Accordingly, long-term projections are an important component in evaluating the 2019 Fiscal Plan's implementation and in the resulting Debt Sustainability Analysis (DSA). The outcome of the DSA pertains to traditional debt only, and not to other types such as contingent or no-default debt. Given large swings in debt sustainability shown in the sensitivity analysis, the amount of sustainable debt should be made contingent on several factors. Finally, the debt sustainability analysis should account for new facts when available and errors when proven.

The 2019 Fiscal Plan is a 30-year plan, as any restructuring of the Commonwealth's legacy obligations will not extend beyond 30 years. In addition, longer-term projections involve even further forecasting risk.

6.1 Macroeconomic, revenue and expenditure projections

Most macroeconomic trends are projected to be variable throughout the hurricane recovery period, with a bounce back in economic activity in FY2019 and FY2020 that then declines as disaster relief funding drops off considerably and structural reform growth rates are muted. Nominal growth is 1.0-2.0% from FY2035 onward. Population is estimated to steadily decline at an average rate of 1.4% from 2019-2024, reaching a ~1.4% annual decline in the long term,

largely due to declining fertility rates. Inflation settles at a run-rate of 2.0% as it is expected to converge to mainland forecasts.

Most revenues are projected to grow with nominal GNP in the long term. ²⁰ This includes SUT, corporate income tax, personal income tax, non-resident withholding not paid by Act 154 entities and most General Fund revenues. Exceptions include:

- **Alcoholic beverages and cigarette-related tax revenues**, which are expected to grow by inflation and population. This assumption is supported both by relatively constant alcohol consumption in growing economies along with long-term decline in cigarette consumption both in Puerto Rico and the U.S. mainland.
- **Rum excise on off-shore shipments,** is expected to grow by U.S. mainland population and is partially driven by the statutory waterfall by which rum excise taxes are paid into the General Fund.
- Non-resident withholding (NRW) and Act 154 revenues, which will face declines due to U.S. tax reform, supply chain diversification, and patent expirations. FY2019 reporting year-to-date suggests that such a decline had not yet begun, but the underlying risks have not changed. As such, the decline in revenues has been pushed back on year to begin in FY2020, after which a gradual decline in revenues (between \$100-200 million per year) leads to a steady state of \$859 million in annual Act 154 revenues beginning in FY2031. NRW payments made by Act 154 payers are projected to follow a similar trajectory. After reaching steady state in FY2031, both remain flat at ~45% and ~55% of their FY2018 levels, respectively. NRW revenues not related to Act 154 payers continue to grow with nominal GNP.
- Independently Forecasted Component Units (IFCU) revenues: IFCU revenues are projected on a line item basis and grow by the same values as in the short-term projections (largely by nominal GNP, with exceptions for those related to healthcare, population, or other factors). The only IFCU with a different short-term and long-term revenue projection is State Insurance Fund Corporation, for which the Fiscal Plan projects an increase in revenues related to disaster recovery for FY2019-FY2032, reflecting the short-term increase in construction sector activity.

Tax legislation from Act 257 (2018) is projected to be revenue-neutral over the course of the 2019 Fiscal Plan, with reductions in sales and use taxes offset by revenue gains in income taxes.

Federal fund revenues grow based on historical and statutory appropriations. **Medicaid** receives the most significant federal funding. Standard Medicaid matching funds grow by the medical services component of CPI-U, CHIP funding grows proportional to premiums growth, Municipal intra-governmental transfers remain constant, and prescription drug rebates grow proportionally to healthcare costs and population.

Just as most revenues grow by GNP, most **expenditures grow by standard inflation** after FY2024. Exceptions include:

■ **Medicaid premiums** grow at a faster pace than standard inflation, and are instead grown by healthcare inflation and population change. After FY2024, the age-mix-adjusted PMPM inflation rate is expected to increase slightly from 4.90% in FY2024 to 5.10% in FY2038, then to fall to 4.97% by FY2049. This projection is inclusive of two countervailing factors. First, on average, cost per person will increase as the population on Medicaid shifts into older age brackets (i.e., there will be people within the 55-65 age bracket on Medicaid). Second, general cost efficiency spillovers from the U.S. mainland are expected to exert downward pressure on PMPMs. Non-premium costs, such as administrative and payroll costs grow by standard inflation in the long-term.

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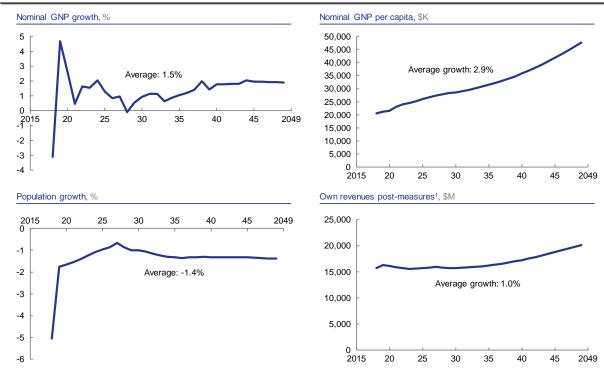
²⁰ This methodology is consistent with general IMF forecasting approaches and is intended to capture the overall change in consumption, investment and production within the economy

- Capital expenditures are anticipated to rise to 1.9% of GNP (in line with the mainland average) by FY2038, increasing the annual Commonwealth average to \$764 million over FY2038-FY2049, as Puerto Rico must sustain a higher level of maintenance and rely on its own funding for capital investments (rather than disaster relief funding). Cost match for disaster-related federal funding increases to an average of ~\$101 million from FY2026 to FY2032, as the Commonwealth pays the entirety of the cost match during that period. The Commonwealth is not responsible for the portion of funds allocated to instrumentalities (e.g., PREPA, PRASA, HTA).
- Independently Forecasted Component Units (IFCU) expenditures are forecasted on a line item basis. Most grow with standard Puerto Rico inflation with some exceptions, such as healthcare- or claims-related expenditures. Over the long-term, the expenses of healthcare-related IFCUs (e.g., ASEM, Cardio) are projected to grow faster than revenues, creating a deficit. This Fiscal Plan assumes deficits related to healthcare will be funded by the Commonwealth.

Fiscal measures grow by their relevant macroeconomic indicator (e.g., revenues by nominal Puerto Rican GNP, expenditures by Puerto Rican inflation, healthcare measure by health inflation and population).

The long-term macroeconomic projections show trends as below (**Exhibit 21 and Exhibit 22**).

EXHIBIT 21: 30-YEAR FINANCIAL PROJECTIONS



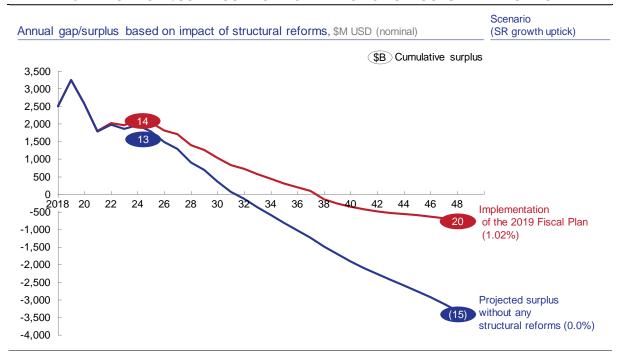
¹ Own revenues includes all Commonwealth-collected revenues and excludes all federal transfers and gross up revenues; includes impact of COFINA settlement

EXHIBIT 22: LONG-TERM FISCAL PLAN PROJECTIONS POST-MEASURES AND STRUCTURAL **REFORMS**

Projection	FY2024	FY2029	FY2034	FY2039	FY2044	FY2049
Population, thousands	2,903	2,779	2,622	2,453	2,295	2,142
Population growth rate, %	(1.1%)	(1.0%)	(1.3%)	(1.3%)	(1.3%)	(1.4%)
Real GNP growth, %	0.5%	(0.9%)	(0.7%)	(0.6%)	0.0%	(0.1%)
Nominal GNP, \$M	77,670	80,441	84,298	90,405	99,037	108,996
Nominal GNP per capita, \$	26,756	28,949	32,152	36,861	43,163	50,873
Nominal GNP per capita growth, %	3.1%	1.5%	2.2%	2.7%	3.3%	3.2%
Inflation, %	1.5%	1.4%	1.6%	2.0%	2.0%	2.0%
Disaster funding, \$M	6,774	1,468	-	-	-	
Revenues ¹ , \$M	20,778	21,238	22,000	23,460	25,526	27,947
Commonwealth revenues	15,640	15,711	16,045	16,983	18,412	20,125
Federal transfers	5,139	5,526	5,955	6,477	7,114	7,822
Expenditures ¹ , \$M	(\$18,658)	(\$19,979)	(\$21,573)	(\$23,728)	(\$26,098)	(\$28,746)
Commonwealth-funded expenditures	(\$13,644)	(\$14,562)	(\$15,699)	(\$17,293)	(\$18,981)	(\$20,868)
Federally-funded expenditures	(\$5,014)	(\$5,417)	(\$5,874)	(\$6,435)	(\$7,117)	(\$7,878)
Gap/surplus, \$M	2,120	1,259	426	(268)	(571)	(799)
Contractual debt service payments ²	(1,692)	(1,995)	(1,780)	(1,150)	(163)	(50
Net gap / surplus, \$M	429	(736)	(1,353)	(1,418)	(734)	(848
Surplus potentially not available ³ , \$M	198	152	141	157	190	24

¹ Revenues and expenditures excluding gross up adjustments

EXHIBIT 23: ANNUAL GAP/SURPLUS BASED ON IMPACT OF STRUCTURAL REFORMS



The 2019 Fiscal Plan forecasted surpluses are primarily revenue driven in the short term, with accelerating forecasted expenditure growth producing out-year deficits. Short-term surpluses are driven by fiscal measures and structural reforms, accompanied by federal funding for Medicaid and disaster relief and enhanced revenue actuals (Exhibit 23). Long-

² Debt service based on prepetition contractual debt obligations. Presented for illustrative purposes only & does not represent anticipated future payments on restructured debt. Includes GO PBA, CCDA, PRIFA, PFC, ERS, PRIDCO. The 2019 Fiscal Plan does not assume any predetermined outcome of ongoing litigation with respect to GO bonds 3 These surplus amounts are generated by Commonwealth corporations and the Commonwealth's ability to access such surplus amounts could be at risk without further legislative action

term deficits are driven by healthcare costs that outpace GNP growth, lack of robust structural reforms, phase out of disaster relief funding, and declining Act 154 revenues.

While the 2019 Fiscal Plan projects deficits as from FY2038 onward, the Government will be required to take additional measures that go beyond the five-year framework of this 2019 Fiscal Plan as the Puerto Rico Constitution requires the Government to operate within a framework of fiscal balance. Accordingly, what follows are a set of options future governments can consider in order to obtain fiscal balance in the out-years. Some of these reforms—which would reduce deficits and therefore make funds available for a variety of potential uses, including investment in the people of Puerto Rico—have been proposed by the Oversight Board, but not been adopted, and the Oversight Board cannot implement them on its own.

- **Labor reform,** generating an additional 0.50% GNP growth over two years, by repealing Law 80, reducing paid leave, and eliminating the Christmas Bonus. Key reforms could require incentives, such as wage subsidies for low-income workers and training programs to address identifiable skills gaps. The reform is projected to increase the 30-year surplus by \$13 billion if implemented after 10 years (FY2029) and by \$4 billion if implemented within 20 years (FY2039).
- **Ease of Doing Business reform,** generating an additional 0.15% GNP growth, based on instituting Trading Across Borders reform to improve customs processes and congestion and repealing restrictive laws (e.g., Laws 21 and 75 dictating terms for terminating commercial supplier relationships). The 30-year surplus is projected to increase by \$4 billion if implemented after 10 years (FY2029) and by \$1 billion if implementation lags by 20 years (FY2039).
- Overhaul of the tax system of Puerto Rico to stimulate growth, requiring short-term investment (lower revenues in short-term) for long-term growth benefits up to 0.5% spread over 5 years. The reform is projected to increase the 30-year surplus by \$10 billion if implemented after 10 years (FY2029) and by \$2 billion if implementation lags by 20 years (FY2039).
- Imposing a cap on total healthcare expenditure growth at 1% above standard inflation is projected to result in savings of ~\$11 billion by FY2049 if implemented in FY2029 and \$2.3 billion if implemented in FY2039.
- **Securing additional permanent federal funding for Medicaid** of ~\$1B per year projected to grow with inflation is projected to increase the 30-year surplus by \$25 billion if begun in FY2029 and \$12 billion if begun in FY2039.

Risks to the long-term projections in the 2019 Fiscal Plan. While the 2019 Fiscal Plan projects that ~\$26 billion surplus will be generated through FY2019-2037, there are several variables that have a material impact on the long-term financial projections in the 2019 Fiscal Plan. For example, revenues could be compromised through lower growth generated by delayed or not implemented structural reforms, lower than expected federal funding for reconstruction, less efficient spending on capital than projected. Both revenues and expenditures could be impacted by demographic shifts not yet seen on the Island, and in the areas of government expenditures:

- Lack of implementation of healthcare reform measures could affect the long-term projections of the 2019 Fiscal Plan. If healthcare reform measures are not implemented starting in FY2020 the surplus would decrease by \$27 billion.
- Implementation risk of agency efficiency measures also exists. For example, if only 50% of the projected run rate agency efficiency measures are achieved, the 30-year surplus would decrease by \$33.4 billion. Similarly, if only 75% of the projected run rate agency efficiency measures are achieved, the 30-year surplus would decrease by \$16.7 billion.

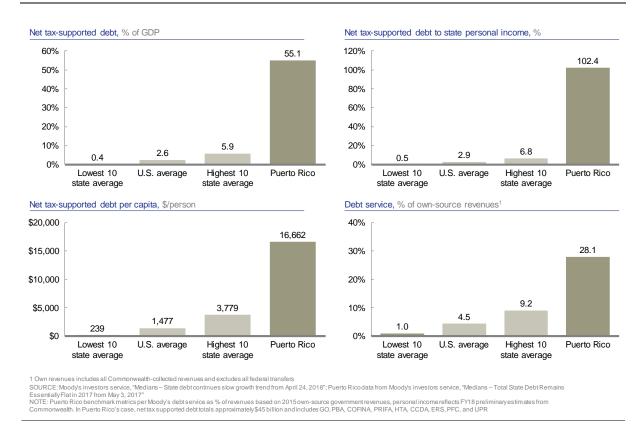
Managing deficits with early year surpluses. The 2019 Fiscal Plan projects a surplus—generated by structural reforms, fiscal measures, and increased federal funding—through FY2037, and deficits thereafter. In addition to implementing the structural reforms identified above, these would increase the Island's competitiveness, improve its economy, and produce surpluses. If and when there are deficits in any year, there are also a number of strategies that the Oversight Board and Government can pursue to manage those deficits with early year surpluses. Options include prepaying future legacy obligations, such as debt or pensions; buying back existing debt; and using new money debt to finance capital expenditures.

6.2 **Debt Sustainability Analysis (DSA)**

The DSA is intended to provide a framework for assessing the long-term capacity of the Government to pay debt service on its bonded debt. Debt levels post-restructuring need to be sustainable over the long-term and consistent with both a minimal risk of default on the restructured debt and a recovery of market access for future new money capital borrowings for ongoing infrastructure investment. The analysis begins with the 2019 Fiscal Plan and is then informed by the debt sustained by the most appropriate peer group against which to benchmark Puerto Rico. The DSA then applies rating agency metrics for that benchmark group to Puerto Rico to arrive at an assessment of what debt levels are sustainable in light of long-term projections and the peer metrics. Net tax-supported debt is defined as debt payable from statewide taxes and other general resources, net of obligations that are self-supporting from pledged sources other than state taxes or operating resources (such as utility or local government revenues). Puerto Rico has approximately \$45 billion of net tax-supported debt comprised of GO, PBA, COFINA, PRIFA, HTA, CCDA, ERS, PFC, and UPR. Net of the COFINA debt that has already been restructured pursuant to its own Title III Plan of Adjustment, Puerto Rico's other net tax-supported debt outstanding totals approximately \$27 billion.

U.S. states as peer comparables. For many reasons, U.S. states are the most appropriate comparison group to use in benchmarking sustainable debt levels for Puerto Rico. Like U.S. states, Puerto Rico does not control its own currency, has no access to IMF restructuring support programs or similar international sovereign relief funding packages, and traditionally has been reliant on access to the same long-term municipal bond market used by the U.S. states to finance their capital needs. Puerto Rico's bonds also are rated by the same rating agency analyst groups that assign ratings to U.S. states, not by foreign sovereign bond rating analysts. For these and other reasons, Puerto Rico has more similarities to U.S. states than to sovereign nations. By virtually any measure tracked by the rating agencies, Puerto Rico's existing debt levels are clear outliers relative to these U.S. state peers (**Exhibit 24**).

EXHIBIT 24: US STATES AS COMPARABLES

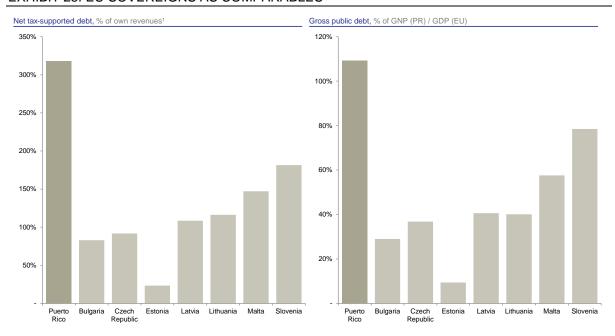


While some observers note that Puerto Rico residents do not pay federal income taxes, they do pay Social Security and Medicare taxes, and the low per capita income levels would place most Puerto Ricans in a tax bracket where they would otherwise pay little or no federal income tax. Meanwhile, federal reimbursement levels provided to Puerto Rico for the largest Commonwealth spending programs (including Medicaid and transportation) are capped at levels well below the FMAP and federal highway reimbursement levels provided to comparably sized and wealthier states. Puerto Rico's residents pay graduated income taxes to Puerto Rico at brackets comparable to the federal income tax rates, thereby providing the funds needed to provide services to the Puerto Rico resident population, which is far poorer than the population of any U.S. state. Yet Puerto Rico receives less federal support. The 2017 U.S. Census Bureau estimate of per capita income in Puerto Rico was \$12,081, 46.3% below the lowest U.S. state and 61.2% below average U.S. mainland per capita income.²¹

In general, foreign sovereigns are not the most appropriate comparable to use in determining Puerto Rico's debt sustainability levels given the reasons described above, but of foreign sovereigns, smaller European Union countries offer the closest comparator. Like Puerto Rico, these EU nations also lack their own currency and monetary policy levers, although they can and do access IMF financial support. Puerto Rico's current debt levels are also an outlier when compared to these EU sovereigns (**Exhibit 25**).

²¹ U.S. Census Bureau Quickfacts, 2017

EXHIBIT 25: EU SOVEREIGNS AS COMPARABLES



1 Own revenues includes all Commonwealth-collected revenues and excludes all federal transfers
SOURCE: Puerto Rico data from Commonwealth sources and Board Economist; European Commission Debt Sustainability Monitor 2017 Institutional Paper 071, published January
2018 and data from the World Bank at https://data.worldbank.org/

Metrics for debt sustainability. Viewing U.S. states as the most comparable group for benchmarking Puerto Rico, the DSA uses the debt ratio metrics in the April 24, 2018 Moody's Investors Service ("Moody's) report "States – U.S. Medians – State debt continues slow growth trend" and the "Fixed Costs" ratio metrics in Exhibit 20 of the August 27, 2018 Moody's report "States – U.S. Medians – Adjusted net pension liabilities spike in advance of moderate declines" to develop a range of levels for sustainable debt capacity, including maximum annual debt service levels for Puerto Rico on its restructured existing debt. The key debt ratios and "Fixed Cost" ratios for the ten lowest indebted states, the ten highest indebted states, and the mean for all U.S. states are shown below (**Exhibit 26**).

EXHIBIT 26: KEY DEBT RATIOS FOR TEN HIGHEST INDEBTED STATES

	et tax-supported de of GDP ¹	ebt		t tax-supported d			t tax-supported o	lebt per		bt Service of own-source re	venues ²		red Costs of own-source re	venues ²
	Low 10 Mean Top 10	0.4% 2.6% 5.9%		Low 10 Mean Top 10	0.5% 2.9% 6.8%		Low 10 Mean Top 10	\$239 \$1,477 \$3,779		Low 10 MEAN Top 10	1.0% 4.5% 9.2%		Low 10 MEAN Top 10	3.6% 10.3% 20.9%
1	Connecticut	9.0%	1	Hawaii	10.4%	1	Connecticut	\$6,544	1	Connecticut	13.80%	1	Connecticut	30.30%
2	Hawaii	8.9%	2	Massachusetts	9.5%	2	Massachusetts	\$6,085	2	Massachusetts	11.70%	2	Illinois	28.40%
3	Massachusetts	8.3%	3	Connecticut	9.5%	3	Hawaii	\$5,257	3	Hawaii	10.50%	3	Hawaii	24.80%
4	New Jersey	6.7%	4	New Jersey	7.0%	4	New Jersey	\$4,281	4	New Jersey	9.40%	4	Kentucky	20.50%
5	Mississippi	5.1%	5	Illinois	5.6%	5	New York	\$3,082	5	Illinois	9.20%	5	Massachusetts	19.90%
6	Illinois	4.7%	6	Delaware	5.5%	6	Illinois	\$2,919	6	New York	8.10%	6	New Jersey	19.10%
7	Kentucky	4.5%	7	Mississippi	5.2%	7	Washington	\$2,662	7	Washington	7.70%	7	Pennsylvania	17.90%
8	Washington	4.1%	8	New York	5.2%	8	Delaware	\$2,587	8	Kentucky	7.30%	8	Maryland	17.50%
9	New York	4.1%	9	Kentucky	5.1%	9	California	\$2,188	9	Maryland	7.00%	9	West Virginia	16.00%
10	Rhode Island	4.0%	10	Washington	5.0%	10	Rhode Island	\$2,188	10	Mississippi	6.90%	10	Utah	14.20%

¹ Moody's investors service, "Medians – State debt continues slow growth trend from April 24, 2018"
2 Moody's investors service, "Medians – Adjusted net pension liabilities spike in advance of moderate declines from August 27, 2018'

Exhibit 26 uses the long-term 30-year macroeconomic forecast to determine a range of implied debt capacity based on the debt and fixed cost metrics of the *average* U.S. state. The debt capacity ranges shown are based off the following five methodologies: (i) debt to own-source revenues, (ii) debt per capita, (iii) debt to state personal income; (iv) debt to GDP and

[&]quot;Fixed costs" are the FY2017 sum of each state's (1) net tax-supported debt service expense and their (2) actual budgetary contributions to pension expense and retiree health care ("OPEB"), as reported by Moody's

(v) fixed costs to own-source revenues. Implied debt capacity and expected growth in debt capacity must be sufficient to cover both restructured debt and debt service on any future new money capital borrowings Puerto Rico needs to maintain its public infrastructure. To the extent new and additional revenues are enacted in the future, including revenues designed to support future capital projects or generated by public-private partnership infrastructure investments, then those initiatives could generate additional debt capacity for Puerto Rico that is not reflected in the current 2019 Fiscal Plan projections. The 5-year average capacity statistics represent the average par amount between the four methodologies of an implied 5% 30-year level debt service structure. Moody's defines "fixed costs" as the sum of a state's annual debt service and its annual budgetary pension and retiree health care (i.e. OPEB) expenditures. Given that Puerto Rico's public employee pension system is essentially zero percent funded—and that as a consequence the central Government must pay pension expenditures on a fully "pay go" basis from budgeted revenues each year—the fixed costs ratio helps capture that burden in comparison to the level of fixed costs as a percentage of Own-Source Revenues for U.S. States.

EXHIBIT 27: IMPLIED NET TAX-SUPPORTED DEBT CAPACITY RANGE BASED ON AVERAGE U.S. STATE (\$M)

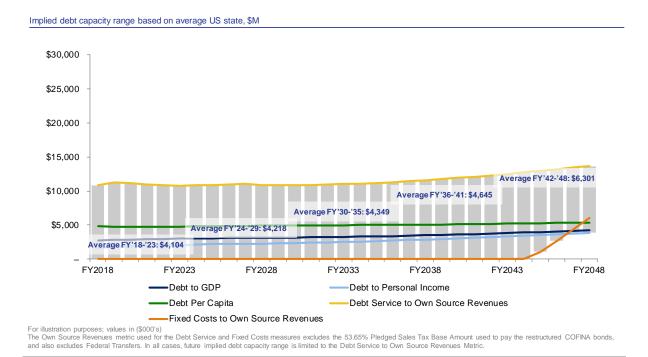
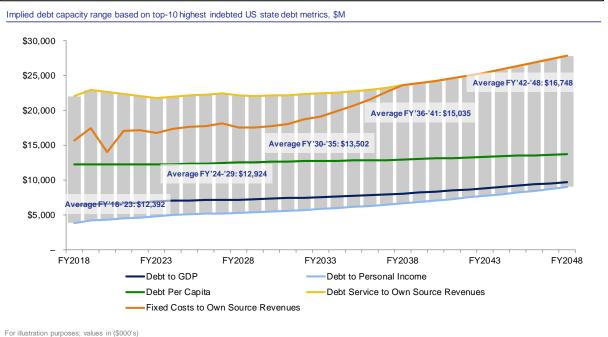


Exhibit 28 uses the long-term 30-year macroeconomic forecast to determine a range of implied debt capacity based on the debt metrics of the *10 highest indebted* U.S. states. The debt capacity ranges shown are based off the following four methodologies: (i) debt service to own source revenues, (ii) debt per capita, (iii) debt to state personal income, (iv) debt to GDP and (v) fixed costs to own-source revenues. Implied debt capacity and expected growth in debt capacity must be sufficient to cover both restructured debt and future debt issuance. The 5-year average capacity statistics represent the average par amount between the four methodologies of an implied 5.0% 30-year level debt service structure.

EXHIBIT 28: IMPLIED NET TAX-SUPPORTED DEBT CAPACITY RANGE BASED ON TOP-10 HIGHEST INDEBTED U.S. STATE DEBT METRICS (\$M)



For incustation pulposes, values in (3000 s)
The Own Source Revenues metric used for the Debt Service and Fixed Costs measures excludes the 53.65% Pledged Sales Tax Base Amount used to pay the restructured COFINA bonds, and also excludes Federal Transfers. In all cases, future implied debt capacity range is limited to the Debt Service to Own Source Revenues Metric.

The illustrative implied levels of the Government's restructured debt in the previous chart are calculated by applying the Net Tax Supported Debt ratios of the "top ten" U.S. states (in terms of debt load) to Puerto Rico's future projected GDP, population and Own-Source Revenues. Debt Service to Own Source Revenue and Fixed Costs to Own Source Revenues figures are derived assuming debt service of a long-term level debt service structure, with a 5% average coupon.

Maximum annual debt service cap on restructured fixed payment debt. The implied debt capacity and expected growth in debt capacity must be sufficient to cover both the payments due on the restructured debt and all payments due on future new money borrowings. Accordingly, the aggregate debt service due on all fixed payment debt issued in the restructuring of the Government's existing tax-supported debt should be capped at a maximum annual debt service ("MADs") level. The cap would be derived from the U.S. state rating metrics, and specifically from what Moody's calls the "Debt Service Ratio." The Debt Service Ratio is the ratio of total payments due in a year on all existing net tax-supported debt over that state government's own-source revenues (i.e., excluding federal transfer payments) in that year.

The Moody's report indicates that the average Debt Service Ratio for the all U.S. states is 4.5%. The Moody's report indicates that the average Debt Service Ratio for the top 10 most indebted states is 9.2%. To the extent either of these Debt Service Ratios is used to set a MADs cap on the restructured debt and the Primary Surplus is below the MADs level, then the debt service due on fixed payment debt would need to be set at the lower of the amount available for debt service or the MADs limit.

With respect to the Moody's Fixed Costs Ratio, the August 2018 Moody's report indicates that the average Fixed Costs Ratio for all U.S. States is 10.3%. The same report indicates that the average Fixed Costs Ratio for the 10 States with the highest Fixed Costs Ratios is 20.9%.

Any additional cash flow above the MADs cap applied to the restructured fixed payment debt that is generated over the long-term from successful implementation of the 2019 Fiscal Plan could be dedicated to a combination of contingent "growth bond" payments to legacy bond

creditors, debt service due on future new money borrowings needed to fund Puerto Rico's infrastructure investments and additional "PayGo" capital investment to reduce the Government's historically out-sized reliance on borrowing to fund its needs, among other purposes.

Debt sustainability analysis. Exhibit 29 calculates implied debt capacity based on a range of interest rates and 2019 Fiscal Plan risk factors under an assumed illustrative 30-year term and level debt service. The risk factor is calculated by reducing the amount of projected cash flow available per year for debt service by a certain percentage. For example, a 20% risk factor case would use only 80% of the projected cash flow available to pay debt service on fixed payment debt.

EXHIBIT 29: IMPLIED DEBT CAPACITY BASED ON RANGE OF INTEREST RATES AND RISK FACTORS (\$M)

		Sensitivity Ana Implementation		ebt Capacity at 20)%
strative Cash Flow Available		\$400	\$600	\$800	\$1,000
	4.0%	\$5,533	\$8,300	\$11,067	\$13,834
Sensitivity Analysis: Varying PV Rates	5.0%	4,919	7,379	9,838	12,298
	6.0%	4,405 Sensitivity Ana	6,607 lysis: Implied D	8,809 ebt Capacity at 59	,
strative Cash Flow Available		Sensitivity Ana	lysis: Implied D \$600	ebt Capacity at 59	% PV Rate \$1,000
strative Cash Flow Available Sensitivity Analysis:	10.0%	Sensitivity Ana \$400 \$5,534	lysis: Implied D \$600 \$8,301	ebt Capacity at 59 \$800 \$11,068	% PV Rate \$1,000 \$13,835
		Sensitivity Ana	lysis: Implied D \$600	ebt Capacity at 59	11,012 % PV Rate \$1,000 \$13,835 12,298

Restoration of cost-effective market access. Without delay, the Government must develop and adhere to structurally balanced budgets reflecting ongoing fiscal discipline, timely publication of audited financial statements and related disclosure information; it must restructure its current excessive debt load to a sustainable level. As Puerto Rico seeks to regain cost-effective capital markets access, rating analysts and investors will demand that the Commonwealth demonstrate improvement in all four core areas of creditworthiness identified by Moody's: the economy, government finances, governance and "fixed cost" debt service and pension expenditures. Together, these and other measures outlined in the 2019 Fiscal Plan can chart a path to restoring Puerto Rico's market access.

PART III: Restoring growth to the Island

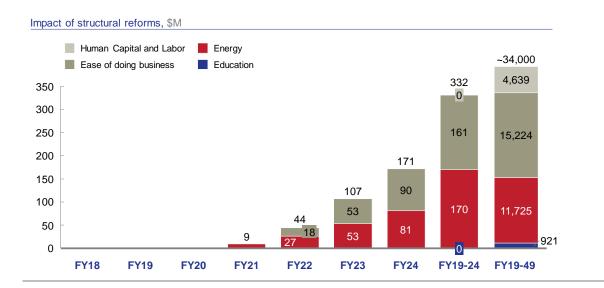
A sustainable fiscal and economic turnaround depends largely on comprehensive structural reforms to the economy of Puerto Rico. Only such reforms can drive growth in the economy, reversing the negative growth trend over the last ~10 years and enabling the Island to become a vibrant and productive economy going forward. To reverse the negative economic trends, the Government must pursue the reforms outlined below. The impact and timing of these reforms has been adjusted to reflect the Government's lack of action, but the Government should take immediate action to spur progress on these reforms in order to benefit from their potential economic impact:

- **Human capital and welfare reforms** will improve workforce participation and the well-being and self-sufficiency of welfare recipients, resulting in a cumulative GNP impact of 0.15% by FY2025. This represents a delay compared to the October 2018 Certified Fiscal Plan. The impact is enhanced in the long-term as K-12 education reforms begin adding an additional 0.01% GNP impact per year, resulting in an additional 0.17% by FY2049.
- **Ease of doing business reforms** will improve conditions for economic activity, job creation, and business vitality, resulting in a cumulative GNP impact of 0.40% by FY2023 (a reduction and delay from the October 2018 Certified Fiscal Plan).
- Power sector reforms will improve availability and affordability of energy for families and businesses, resulting in 0.30% cumulative GNP impact by FY2023. This represents a change from the October 2018 Certified Fiscal Plan due to new timelines.
- Infrastructure reform and capital investment will improve the flow of goods, services, information, and people across the Island. It has not been scored to provide a specific GNP uptick yet will likely contribute a consequential uptick in the Island's long-term development.

If these structural reforms were implemented at the pace and scale outlined in the October 2018 Certified Fiscal Plan, they would have resulted in a sustained 0.95% annual increase to real GNP growth in aggregate by FY2021. The Government has delayed implementation of critical reforms, including a 4+ year delay in full the implementation of the Nutritional Assistance Program (NAP) work requirement – a necessary complement to the Earned Income Tax Credit (EITC) program to enable individuals to enter the formal economy—and a delayed implementation of specific business process changes required to achieve significant improvement in burden and cost of doing business on the Island.

As such, the 2019 Fiscal Plan assumes the growth from these reforms will only reach 0.85% in the short term and does not occur until FY2025. As shown in Exhibit 30, these reforms equal approximately \$34 billion in increased Commonwealth revenues over FY2019-2049. If these reforms were implemented at the pace and scale included in the October 2018 Certified Fiscal Plan, the additional revenues generated would be \$45 billion. In the long term, education reforms are projected to add an additional cumulative 0.17% to GNP growth, making total impact 1.02% by FY2049.

EXHIBIT 30: IMPACT OF STRUCTURAL REFORMS



Chapter 7. HUMAN CAPITAL & WELFARE REFORM

7.1 Current state of human capital and welfare laws

Puerto Rico faces immense challenges with formal labor force participation and preparedness. The Island's formal labor force participation rate is only ~41%, far from the U.S. average (62%) and even the lowest-ranked U.S. state (West Virginia, 54%), and well below other Caribbean islands. ^{22,23} In fact, according to World Bank data, Puerto Rico's formal labor force participation rate is currently 7th lowest in the world and has not ranked higher than the bottom 20 in at least the last thirty years. ²⁴ Puerto Rico's youth unemployment rate is 25.8%, more than double the world average (12.8) and over three times the U.S. average (8.2%). ²⁵ Low labor force participation in Puerto Rico is a function of neither Hurricane Maria nor the economic downturn that began in 2006; rather, low rates of employment are a long-term structural problem that can be addressed only through significant changes to public policy.

Unless Puerto Rico substantially increases its labor force participation and employment, incomes will always be far below those of residents in mainland states and outmigration will continue to draw Puerto Ricans away from the Island. Puerto Rico could improve labor market flexibility through repealing restrictive laws like Law 80 and creating labor conditions more similar to those on the mainland, which would lead to increased labor force participation rates. If Puerto Rico's labor force participation rate were to grow to match even to that of the lowest U.S. state, incomes would rise, poverty would decline, and the budgetary deficit would improve. Increasing labor force participation and job creation may be the single most important reform for long-term economic well-being in Puerto Rico.

The World Bank Group, 2018, via International Labour Organization, ILOSTAT database. Data retrieved in April 2019

²³ Bureau of Labor Statistics, 2018 Employment status of the civilian noninstitutional population, annual averages by state

²⁴ As of April 2019, Puerto Rico's ranking has never surpassed 215th out of the 232 countries, states, and territories tracked by The World Bank Group since The World Bank Group began collecting data in 1990

²⁵ The World Bank Group, 2018, via International Labour Organization, ILOSTAT database. Unemployment as a % of the youth labor force, ages 15-24. Data retrieved in April 2019.

7.1.1 Labor laws

Puerto Rico's historically low levels of formal labor force participation cannot be attributed to any single factor but rather a range of public policies that have served to reduce employment on the Island.

Perhaps the biggest barrier to hiring in Puerto Rico is its lack of "at-will employment," which would make it easier for employers to dismiss unsatisfactory employees. While there are variations in labor laws among the 50 mainland states, 49 of them have adopted some form of at-will employment. In Puerto Rico, Law 80 was passed in 1976 requiring employers to first prove "just cause" before dismissing employees. Law 80's "just cause" requirement applies to any employees hired for an indeterminate period of time, as well as any employee with a tenure longer than twelve months. In addition, Law 80 mandates significant severance pay: 3 months' base wages, plus two weeks' additional wages for every year of the outgoing employee's tenure. The need to establish just cause can be costly for employers because it typically leads to litigation, and many employers simply pay severance to an unsatisfactory employee to avoid a court dispute. Labor legislation like Law 80 that reduces flexibility can also have the additional effect of skewing investment to capital rather than labor, reducing the positive impact of any surplus on the labor market.

While some employees benefit from Puerto Rico's lack of at-will employment, this policy makes it costlier and riskier not only to dismiss, but also to hire, an employee. There is evidence that such job protections lower employment opportunities. For example, studies have found that laws preventing unfair dismissal caused reductions in employment, particularly in labor-intensive industries; ²⁶ and in U.S. states, a study ²⁷ found that expanding unfair dismissal protections caused employers to shift away from using less skilled workers and toward greater use of capital investments and more skilled labor. When Colombia reduced the cost of dismissing workers, unemployment fell and the size of the informal labor force declined. ²⁸ In a 2003 book on labor laws in Latin America and the Caribbean, Nobel Prizewinning economist James Heckman concluded that:

"Mandated benefits reduce employment and... job security regulations have a substantial impact on the distribution of employment and on turnover rates. The most adverse impact of regulation is on youth, marginal workers, and unskilled workers. Insiders and entrenched workers gain from regulation but outsiders suffer. As a consequence, job security regulations promote inequality among demographic groups."

The Government made strides to improve labor market conditions with the Labor and Flexibility Act (Act 4-2017) in January 2017, which added flexibility to overtime regulations and increased work requirements to become eligible for Christmas Bonus and severance pay, among other reforms. However, there is more work to be done.

7.1.2 Welfare policies

In addition to the Island's labor laws, Puerto Rico residents may also face disincentives to participate in the formal labor market due to rules attached to various welfare benefits,

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²⁶ RAND Corporation, 1992

²⁷ Autor, D, Kerr, W, Kugler. "Does Employment Protection reduce Productivity? Evidence from US States." The Economic Journal 177, 2007

²⁸ Kugler (2004). See Dertouzos, James N., and Lynn A. Karoly. "Labor market responses to employer liability." Rand Corporation, 1992; Autor, David H., William R. Kerr, and Adriana D. Kugler. "Does Employment Protection Reduce Productivity? Evidence from U.S. States." The Economic Journal (2007): F189-F217; Heckman, James. Law and employment: Lessons from Latin America and the Caribbean. No. w10129. National Bureau of Economic Research, 2003; Kugler, Adriana D. "The effect of job security regulations on labor market flexibility. Evidence from the Colombian Labor Market Reform." In Law and Employment: Lessons from Latin America and the Caribbean, pp. 183-228. University of Chicago Press, 2004

including the Nutritional Assistance Program (NAP), Medicaid, Section 8 public housing, TANF, WIC, and other programs.

These benefits are sometimes stereotyped with a claim that "welfare pays more than work." While this may be true in isolated cases, the broader problem occurs when welfare beneficiaries work in the formal sector and receive earnings that trigger a reduction in their benefits. The phase-out of government transfer benefits as earned income increases acts as a tax to disincentivize formal employment, as effective hourly wage (income received by working minus the loss of benefits) can be substantially lower than the formal hourly wages received. For many residents, working in the informal sector and collecting transfer benefits can often result in higher effective income than working in the formal sector.

While transfer benefits in Puerto Rico are not more generous than on the mainland in dollar terms, they *are* more generous relative to generally lower earnings on the Island. When benefits are phased out as a beneficiary works, loss of benefits may be larger relative to earnings than for a mainland worker. This can serve as a greater disincentive to work than on the mainland.

It is difficult to quantify how large such disincentive effects may be due to limitations on the data available. Different individuals entitled to different sets of benefits are thus faced with various incentives that inform the ways they engage with the labor market. For a full-time minimum wage worker who receives significant assistance (e.g., TANF, Medicaid), the loss of benefits will offset most or all income received from work, leaving the household no better off. ²⁹ It is reasonable to conclude that for many welfare beneficiaries, formal sector work may sometimes do little to increase household incomes.

Though few Puerto Rico residents receive all these benefits, ³⁰ even receipt of a single type of benefits can alter incentives to engage in the formal workforce. For instance, as of 2016, a single mother with two children and annual income below \$4,900 was eligible to receive approximately \$4,229 in annual NAP ("food stamp") benefits in 2016. But should that individual work 35 hours per week at the minimum wage, her annual earnings of \$12,180 would cause her to lose eligibility for food stamps. Net of taxes on her earnings, working full-time would increase her household's annual income by only \$7,002, equivalent to an hourly wage of only \$3.86. Under those conditions, some individuals may choose not to work in the formal labor market.

Mainland states face many of these same incentive issues, which they address in two ways. First, residents of mainland states are eligible for the federal Earned Income Tax Credit (EITC), which provides a partial refund against federal income taxes for eligible low-income workers. Many states supplement the federal EITC to increase benefits to recipients. By increasing the reward to work, the EITC has been shown to increase labor force participation.³¹ However, because Puerto Rico residents do not pay federal income taxes they are not currently eligible for the federal EITC.

Likewise, the Federal Government requires that food stamp programs on the mainland (Supplemental Nutrition Assistance Program, "SNAP") contain a work requirement. In general, working-age SNAP beneficiaries on the mainland must register for work, cannot turn down a job if offered, and may be required by the state to attend education or work training classes. In addition, federal law requires that non-disabled adults without dependents must

31 See Eissa, Nada, and Jeffrey B. Liebman. "Labor supply response to the earned income tax credit." The Quarterly Journal of Economics 111, no. 2 (1996): 605-637

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³⁰ See Héctor R. Cordero-Guzmán, "The production and reproduction of poverty in Puerto Rico," in Nazario, Carmen R., ed. Poverty in Puerto Rico: A Socioeconomic and Demographic Analysis with Data from the Puerto Rico Community Survey (2014). Inter American University of Puerto Rico, Metro Campus, 2016. Cordero. Notes that the number of TANF beneficiaries in Puerto Rico is relatively modest and many, due to age or disability, are unlikely to work under any conditions

work, attend education, or volunteer at least 20 hours per week to maintain eligibility for benefits.

Puerto Rico's labor and welfare laws may help explain why, despite the Island's natural beauty, attractions and ease of access from the U.S. market, employment in tourism-related industries is low. As of April 2018, according to the Federal Bureau of Labor Statistics (BLS), Puerto Rico employed only 80,000 individuals in the leisure and hospitality industries-15,000 fewer tourism-related jobs than the state of Nebraska³², which both lacks Puerto Rico's natural assets and has an overall population over one-third smaller than that of Puerto Rico.

7.1.3 Workforce preparedness

Finally, Puerto Rico's potential workforce is also not well prepared to fill jobs currently needed by the economy. Poor skill development is largely driven by low educational quality and attainment. Around 20% of Puerto Rico's working age population has less than a high school diploma (compared to U.S. average of under 12%), and about 30% of that same population has a college degree, which is about three percentage points below the mainland average.³³ Meanwhile, Puerto Rico's public schools are underperforming. PRDE K-12 schools have shown declining performance over the past two decades. As of 2017, a quarter of students did not graduate high school at all, ³⁴ while the remainder graduated below basic proficiency levels: in standardized tests, only about half performed at a basic level in Spanish, 35 35% at a basic level in Mathematics, 35% at a basic level in English and 43% at a basic level in Science. 36 Of the 71 countries measured through 2015 OECD PISA scores, Puerto Rico scored 57th in reading (U.S. 24th), 63rd in science (U.S. 25th), and 65th in math (U.S. 40th).³⁷ These challenges contribute to Puerto Rico's rate of youth unemployment, which was more than triple the rate in the U.S. mainland as of 2018.³⁸

Puerto Rico has therefore not solved the supply or demand side issues with its labor market creating huge barriers to economic growth and sustainability for the Island.

7.2 Future vision for the Puerto Rican human capital and welfare reform

Changes to labor and welfare laws are controversial. It is difficult to ask Puerto Rican residents to give up benefits and job protections when, through the economic downturn and then Hurricane Maria, they already have lost so much. Nevertheless, dramatic changes to Puerto Rico's labor market policies are necessary to provide Puerto Ricans the opportunity for a greater standard of living at home, reversing the Island's history of high poverty, constrained budgets, and pressure for young Puerto Ricans to leave their home for the mainland. To ensure Puerto Rico can provide opportunities for its people for years to come, structural reforms must make it easier to hire, encourage workforce participation, and enhance student outcomes and

Bureau of Labor Statistics, Economy at a Glance March 2019; https://www.bls.gov/eag/

³³ Federal Reserve Bank of New York, "An Update on the Competitiveness of Puerto Rico's Economy." July 31, 2014. https://www.newyorkfed.org/medialibrary/media/outreach-and-education/puerto-rico/2014/Puerto-Rico-Report-2014.pdf

Puerto Department of Education Consolidated State 2017; https://www2.ed.gov/admins/lead/account/stateplan17/prconsolidatedstateplanfinal.pdf

³⁵ As of ESSA Consolidated State Plan 2017

³⁶ "Basic level" is defined by National Assessment of Education Progress test administrator as "partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade" and is the bottom of three levels of achievement with the other levels being "proficient" and "advanced." Source: "Medición y Evaluación para la Transformación Académica de Puerto Rico (META-PR) 2015-2016 School Year," PRDE (2016)

³⁷Programme for International Student Assessment (PISA) 2015 Assessment and Analytical Framework, The Organization for Economic Co-operation and Development, August 31, 2017

³⁸The World Bank Group, via International Labour Organization, ILOSTAT database. Data retrieved in March 2017. https://data.worldbank.org/indicator/SL.UEM.1524.ZS.

workforce development opportunities to ensure a pipeline of prepared and appropriately-skilled individuals.

Unfortunately, the Government did not enact the labor reform proposal outlined in previous versions of the certified fiscal plan. Additionally, the Government recently announced several new pieces of legislation and executive orders that will contribute to the restrictive business and costly hiring environment on the Island. One such executive order mandates an increase the minimum wage for construction workers in the public sector, which will directly affect recovery projects driven by disaster funding and the cost and sustainability of private sector construction projects. Further, the Government has failed to implement the NAP work requirement at the same pace as required by the Fiscal Plan. Accordingly, while in the April 2018 Fiscal Plan, robust labor reform would have been projected to generate an uptick of 1% by FY2022 and approximately \$45 billion in additional revenues by FY2049, the 2019 Fiscal Plan projects that the human capital and welfare reforms to which the Government has committed will only generate 0.15% growth for the Island by FY2025 and thus only ~\$5 billion in revenues by FY2049.

7.3 Structural reform initiatives for human capital and welfare reform

Structural reforms should increase incentives and preparedness to work. While full-fledged labor reform has not been implemented, the Government must enact welfare reform measures to encourage formal labor force participation. These reforms should include an Earned Income Tax Credit (EITC) for low-income workers, a work requirement for able-bodied NAP beneficiaries, and programs to develop critical skills in the workforce and improve employment readiness for jobseekers and students.

7.3.1 Welfare structure reforms

To implement the human capital and welfare reform package, address labor market challenges and encourage residents to participate in the formal labor market, the 2019 Fiscal Plan requires the Government to launch an Earned Income Tax Credit (EITC) program by January 2019, raising pay for formal laborers. The Government also must institute a work requirement for the Nutrition Assistance Program (NAP) by July 1, 2019, with no transition period (e.g., full requirements regarding work will begin in July, with a three-month transition period allowed for those trying to find work, schooling, or volunteering opportunities).

Earned Income Tax Credit (EITC)

The EITC is a benefit for working people with low to moderate income. To qualify, people must meet certain requirements and file a tax return, even if they do not owe any tax. The EITC reduces the amount of taxes owed and may result in a cash refund if the benefit is higher than owed taxes.

Since welfare reform in 1996, the EITC has become the cornerstone of anti-poverty policy in the United States. It has refocused the U.S. safety net on working families, dramatically increasing employment among single women with children and removing more children from poverty than any other program. Over the years, the mainland EITC program has translated to approximately 6.5 million people (half of whom are children) lifted out of poverty, improved employment rates (a \$1,000 increase in EITC benefit has been tied to a 7.3% increase in employment), ³⁹ and provided increased opportunities for individuals to invest in their own futures with education, training, childcare, or other costs that improve longer-term outlook.

³⁹ Hoynes and Patel 2015, http://www.taxpolicycenter.org/briefing-book/how-does-eitc-affect-poor-families

From 2006 to 2014, Puerto Rico had a Worker's Tax Credit, which was later discontinued due to its ineffective application. This prior Work Credit applied to 45% of all tax filers at a cost of \$152 million in its last year of implementation. It was smaller than federal EITC programs (\$150-450 versus ~\$2,000 average credit) and did not eliminate high implicit tax rates on low-income employees or do enough to incentivize formal employment. ⁴⁰

In Puerto Rico, implementation of the new EITC should be similar to the federal EITC but adjusted to the relative wages of the Island. Eligible recipients should receive credits according to their marital, family, and earned income. ⁴¹ As earnings increase, the benefit should increase up to a specified cap; at the cap, it would plateau and eventually decrease at the phase-out income level until it reaches \$0 (Exhibit 31), resulting in an average benefit of \$525.30 per individual per year. This structure diminishes the "benefits cliff" many face as their earned income increases, rewarding residents who participate in the formal economy.

EXHIBIT 31: EITC BENEFIT FORMULA

EITC Benefit Formula, \$

- Benefits begin with the first dollar of reported income. As income increases, benefits also increase at the
 phase-in rate (different depending on household size), up to the maximum credit
- When income reaches the phase-in cap, the benefit increase ceases. Benefits remain constant at income levels that fall between the phase-in cap and phase-out start
- When income reaches the phase-out start, benefits begin decreasing at the phase-in rate for each
 additional dollar earned, until income reaches the income cap (at which point benefits are \$0)

Number of Children	Phase-in rate, %	Phase-in cap, \$	Phase-out start, \$	Individual/ Single in- come cap, \$	Married income cap,	Maximum Credit, \$	
0	5.00%	6,000	18,000	20,500	21,750	300	
1	7.50%	12,000	13,000	20,500	24,250	900	
2	10.00%	15,000	16,000	28,500	34,750	1,500	
3 or more	12.50%	16,000	17,000	33,500	42,000	2,000	

For example, a single mother with two children working at minimum wage for 35 hours per week earns approximately \$12,180 annually. With EITC, she can qualify for up to \$1,500 in additional take-home pay per year, effectively raising the minimum wage by more than 12%.

The EITC program is projected to cost approximately \$200 million per year, but the program will raise formal labor force participation significantly, providing a positive return on the investment. The EITC is in effect for tax year 2019, with taxpayers claiming the credit during tax filing season in January — April of 2020. However, more can be done to make residents more aware of this important benefit such that individuals are encouraged to enter the formal labor market to gain access to the EITC.

NAP Work requirement

While NAP (also known by the Spanish acronym, PAN), Puerto Rico's largest welfare program, is similar to the mainland SNAP, it is funded and administered separately and does not include

⁴⁰ New York Federal Reserve Bank, 2014

⁴¹ Eligible participants in an Earned Income Tax Credit program must meet several criteria specified by the IRS: namely, they must earn income through either employment or self-employment (i.e. owning or running a business or farm), they must earn income within the specified limits, and they must either file for a qualified child, or qualify without a qualifying child.

a work requirement. As part of the human capital and welfare reform package that the Oversight Board projects will create substantial growth over the next 30 years, the 2019 Fiscal Plan requires that the Government institute work requirements to qualify for NAP benefits.

Starting in July 2019, able-bodied participants aged 18-59 will be subject to a work requirement; Puerto Rico must complete its application for the program by July 2018. Like mainland SNAP, this work requirement must become effective after the individual has collected NAP benefits for three months. The work requirement may be satisfied with 80 hours per month of paid work, volunteer work, and/or qualified training and education. General exceptions would include those under age 18 or over age 60, parents with dependents under age 18, as well as those who are medically certified as physically or mentally unfit for employment. Children, even if their parents do not work, will continue to receive the benefit.

Any program savings derived from the NAP work requirement must be redistributed to working beneficiaries, effectively increasing take-home pay for workers. The increased worker benefit shall take place through an expansion of the Earned Income Disregard, which will increase the amount of earned income eligible recipients can exclude in calculating the amount of benefits they can claim. For example, a family of four currently receiving NAP will lose the benefit after exceeding a maximum annual income of \$5,904. By creating a sliding scale after this amount or allowing families to exclude a certain amount of earned income from this calculation, Puerto Rico can ensure no one is disadvantaged by seeking work in the formal economy and that no families lose benefits prematurely.

The increase in NAP benefits for workers combined with the EITC would improve conditions for low-income workers in the formal economy and reduce poverty.

Unfortunately, as of May 2019, the Government of Puerto Rico has refused to adopt the work requirement per the requirements of the 2019 Fiscal Plan, which date back to the April 2018 Certified Fiscal Plan. Rather, they propose a 4-year transition to the full work requirement (e.g., in the interim years, allowing those who work only 3 or 6 months to receive the full work benefit). Further, their implementation of this plan is delayed due to slow institution of the technology and training required to enable full roll out. To support the efforts for this important program, in the FY2020 General Fund budget, the Oversight Board included a \$4.7 million increase within the Department of Families grouping to hire case workers and supervisors for the NAP program.

7.3.2 Workforce development programs

Human capital and welfare reforms should increase supply and demand for jobs; to fully close the gap and implement the human capital and welfare reform package, however, the Government must launch specific efforts to ensure that its future workforce is prepared with critical skills.

Workforce Innovation and Opportunity Act (WIOA)

First, the Government must update the WIOA State Plan to focus its programs and incentives on high-priority sectors and capabilities (e.g., aerospace, software development, and creative services). WIOA is the primary way in which the Federal Government invests in adult education and workforce development, and it is designed to help jobseekers access employment, education, and support services to succeed in the labor market, and to match employers with the skilled workers they need. The Government must broaden the list of core industries that qualify under WIOA, and focus on high impact economic sectors to provide a skilled workforce that meets the needs of employers in each specific region. It should integrate this WIOA program with the broader promotional efforts of the Department of Economic Development and Commerce (DDEC). For example, an MOE Agreement with the Puerto Rico

Department of Labor and Human Resources should establish an apprenticeship program aiming to impact innovative industries and post-Maria labor market needs.

Youth development initiatives

In addition to WIOA, the Government should help develop critical skills in the workforce through multiple proposed initiatives, including:

- **Youth development:** Investment in STEM through targeted teacher professional development and related programs; apprenticeship programs through partnership with universities and local businesses; opportunities for work-based learning and business programs; occupational opportunities and certification programs
- **Higher education:** Curriculum development grants and scholarships for UPR students focused on high-impact sectors, e.g., the IT industry and Computer Science.
- **Current labor market:** Apprenticeship Programs through collaboration with the private sector; training & certification programs focused on the areas of reconstruction efforts; creation of a job council to coordinate development and employment opportunities for youth and the unemployed

By pursuing aggressive reforms to incentivize job creation and formal labor market participation, and to improve the overall quality of human capital in Puerto Rico, the Government will fundamentally transform the Island's labor market for the better.

7.4 Implementation and enforcement of human capital and welfare reform

EITC is now in effect, and the first workers will claim it for the first time when they file their 2019 tax returns in early 2020. However, the NAP work requirement has not been implemented according to the approach and timeline in the October 2018 Certified Fiscal Plan (shown in **Exhibit 32**) and are now considered delayed. As such the projected impact of these reforms has been pushed back to FY2025. Implementation must occur at the earliest opportunity to encourage formal workforce participation, upon which a qualified third-party analytical firm retained by the Government and acceptable to the Oversight Board must validate that these work requirements comply with the design laid out above. This third party will share equal information about its work with both the Government and Oversight Board.

A full set of expected milestones are below (**Exhibit 32**). The Government must fulfill these milestones in order to be compliant with the 2019 Fiscal Plan and to give the Oversight Board confidence that they are able to hit relevant savings and growth targets.

EXHIBIT 32: HUMAN CAPITAL AND WELFARE REFORM KEY IMPLEMENTATION MILESTONES

Areas of focus	Action item	Deadline
	Enact EITC legislation	November 30, 2018
	Publish timeline for regulatory guidance for practitioners and taxpayers	December 31, 2018
	Develop and initiate outreach and education plan to maximize participation among eligible taxpayers	January 15, 2019
Earned Income Tax Credit	Complete comprehensive fraud mitigation plan	March 31, 2019
	Release draft forms including what documentation is required to claim credit	June 30, 2019
	Complete systems changes needed to process EITC returns	September 30, 201
	Open tax filing season and begin paying EITC claims	January 1, 2020
	Monitor and publish take-up of EITC	Ongoing
	Submission of PAN work requirement proposal to FNS	July 1, 2018
	Receive approval from FNS for new program	October 1, 2018
	 Publish FNS-approved state plan, which details PAN work requirement and confirms alignment with Fiscal Plan requirements 	October 31, 2018
PAN Work	 Hire a qualified third-party analytical firm (acceptable to the FOMB) to oversee implementation of work requirement 	December 31, 2018
Requirement	 Launch eligibility review for PAN recipients 	April 1, 2019
	 Full PAN work requirement takes effect, thereby subjecting beneficiaries to the work requirement after three months of benefit collection 	July 1, 2019
	 Qualified third-party analytical firm validates that PAN work requirement is being fully implemented 	September 30, 201
	Publish annual report on PAN impact	December 31, 2020
	Monitor and publish key metrics of PAN	Ongoing
	Identify high-priority sectors and capabilities	June 30, 2018
	 Update the WIOA State Plan to focus on high-priority areas and integrate WIOA program with broader DDEC initiatives 	September 30, 201
Skill	• Publicly announce partner organizations (public and private) for apprenticeship, training, and certification programs	December 31, 2018
Preparedness	Establish job council to coordinate development and employment opportunities for youth and the unemployed	March 31, 2019
	Publicly announce details of apprenticeship, training, and certification programs	April 30, 2019
	 Launch apprenticeship, training, and certification programs 	July 1, 2019
	 Publish key metrics related to impact 	Ongoing

Chapter 8. EASE OF DOING BUSINESS REFORM

One of the best ways to increase economic growth is to attract additional investment and create new jobs. The competitive environment in Puerto Rico requires improvement if to compete with other investment destinations, specifically by reducing a variety of inefficiencies related to building, expanding and attracting businesses. Easier-to-navigate regulations, less complex and faster investment and permitting mechanisms, and streamlined tax administration systems can encourage new businesses to hire employees and invest in growth. These outcomes can be achieved by making necessary administrative and legislative changes and by investing in digitization.

To quantify a jurisdiction's overall effectiveness in this regard, the World Bank created the Doing Business Index, which ranks 190 countries and entities worldwide on several core indicators. Countries and territories that have been able to meaningfully improve their ranking have shown real growth. For example, when the Republic of Georgia improved its ranking from #98 in 2006 to #8 by 2014, output per capita increased by 66% and business density tripled. A study in Portugal showed that the introduction of a one-stop shop for business registration led to a 17% increase in new firm registrations and seven new jobs per 100,000 inhabitants; separately, research in Colombia showed that establishing a one-stop shop for businesses led to a 5.2% increase in new firm registrations.

Ease of doing business remains an area in which Puerto Rico has much room for improvement. The 2019 Fiscal Plan re-iterates the **need for urgent action**, **particularly in light of no progress in Puerto Rico's ranking in the categories of Ease of Doing Business that have proven most important to stimulating growth in other jurisdictions.** For example, from 2018 to 2019, Puerto Rico fell 3 slots in construction permitting, from 138 to

141, in registering property, 6 slots from 153 to 159, and in starting a business 6 slots from 47 to 53.

The Oversight Board acknowledges recent initiatives announced by the Government to streamline the permitting process and expects committed actions to ensure that this results in meaningful change during the next fiscal year.

8.1 Current state of business regulation and investment attraction

In the 2018 and 2019 Ease of Doing Business Report, Puerto Rico was ranked 64th. This represents a 9-point decline from 2017 and is 58 spots lower than the U.S., which ranks 6th overall. While the overall ranking did not change in 2019, the underlying trends on the most critical improvements needed to encourage growth in Puerto Rico were negative – such as getting electricity, construction permitting, and registering property. There are some areas of strength: Puerto Rico placed 6th for Getting Credit and 9th for Resolving Insolvencies. ⁴² It has also made recent efforts to digitize government services to improve speed and accessibility, having launched the Single Business Portal (SBP) in July 2018, which currently includes online filing system for defined Acts (Acts 14, 20 and 22) but should ultimately consolidate permit requests, filing for incentives and annual reporting on these Acts. However, as of 2018, when compared to the mainland, Puerto Rico had several areas for improvement, in particular:

Registering Property (rank 153, U.S. 37): It took 191 days to register property in Puerto Rico, compared to 12 days in the mainland United States.

Dealing with Construction Permits (rank 138, U.S. 36): It took 22 procedures and 165 days to get a construction permit in Puerto Rico, compared to 5 procedures and 89 days in the mainland United States. Obtaining a permit in Puerto Rico costs 6.2% of total future value of the permit (vs. 0.3% in the mainland United States). Despite these challenges, Puerto Rico is already strong in its building quality control index (12 on a 0-15 scale, compared to 8 for the mainland United States).

Paying Taxes (rank 161, U.S. 36): Puerto Rico required 16 payments per year (11 in U.S.), and it took 218 hours per year to prepare, file, and pay the corporate income tax (175 in U.S.). Puerto Rico also had a comparatively high total tax and contribution rate at 63.4%, 43 compared to 45.8% in the mainland United States.

Getting Electricity (rank 69, U.S. 49): Energy costs remained a major inhibitor to operating large-scale business efficiently on the Island. Electric bills for similar amounts of electricity cost twice as much in Puerto Rico as in the U.S. mainland.⁴⁴ Puerto Rico's low ranking was also driven largely by low reliability of supply and transparency of tariff index rated a 4 (on a 0 to 8 scale) by the World Bank, compared to 8 on the U.S. mainland.⁴⁵

In addition to needing to improve its overall business regulatory climate, Puerto Rico is lagging in its ability to attract investment and tourism. For example, in 2015-2016 Puerto Rico saw its

⁴² All economic rankings are benchmarked to June 2017. Rankings can be found in the World Bank's Doing Business reports: http://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2018-Full-Report.pdf

⁴³ The total tax rate measures the amount of taxes and mandatory contributions payable by the business in the second year of operation, expressed as a share of commercial profits

⁴⁴The Guardian, "Puerto Rico's Soaring Cost of Living," 2015. https://www.theguardian.com/world/2015/jul/12/puerto-rico-cost-of-living

⁴⁵ All specific U.S. comparison based on New York City, as averages vary across the country

number of jobs and establishments declining (before the effects of Maria), ⁴⁶ and as of 2015 it ranked 55th overall in the World Economic Forum's worldwide Travel & Tourism Competitiveness Index (while the U.S. rank is 6). ⁴⁷ Countries that have focused on improving investment and tourism have seen great success. When Ireland created its Industrial Development Authority (IDA), it transformed Ireland into a popular location for new investments. ⁴⁸ Ireland is now home to 9/10 of the world's top pharmaceutical and software companies. Meanwhile, when Barbados created its Tourism Product Authority in 2014, it began generating returns as soon as 1-2 years later: travel and tourism direct contribution to GDP increased by 5.4% in 2015 and 10.3% in 2016; and direct contribution of tourism to employment increased by 4.3% in 2015 and 9.8% in 2016.

The Government has made important efforts recently to generate investment in the Island by creating Discover Puerto Rico (DPR) and Invest Puerto Rico (iPR), with the goal of incentivizing foreign direct investment (FDI), private sector investment and tourism. However, these entities will need clear goals and metrics to be most effective.

8.2 Future vision for Ease of Doing Business reform

Puerto Rico should achieve a best-in-class business environment by taking targeted steps to improve rankings in key identified Doing Business Index indicators by FY2023, with the goal of closing the gap with the mainland U.S. by at least 50% from its 2018 rankings:

- Overall: Move from 64 to at least 57⁴⁹
- Construction Permits: Move from 138 (141 in 2019) to at least 87
- Registering Property: Move from 153 (159 in 2019) to at least 95
- Paying Taxes: Move from 161 (162 in 2019) to at least 99
- Getting Electricity: Move from 69 (88 in 2019) to at least 59

In each of these areas, as outlined in more detail below, there are underlying measures of progress that the Government should target for improvement.⁵⁰ For example, number of procedures, hours required, time required, and direct costs.

In addition, in line with best-in-class investment offices, ⁵¹ by FY2023 **iPR should:**

- Create 54,000 new jobs (or average 9,000 new jobs per year)⁵²
- Lead 750 new capital investments (or average 150 per year)⁵³

⁴⁶ Puerto Rico Department of Labor and Human Resources, Bureau of Labor Statistics. "Puerto Rico Economic Analysis Report 2015-2016." https://www.doleta.gov/performance/results/AnnualReports/docs/2017_State_Plans/ Economic_Reports/Puerto%20Rico/PR%20Economic%20Analysis.pdf

⁴⁷As of 2015, latest available information for Puerto Rico. Puerto Rico was not included in World Economic Forum's 2017 report due to insufficient data

⁴⁸ In 2016, the IDA supported 60,000 jobs in 2016 at a cost of ~€9,000 per job sustained, and U.S. companies had invested ~€240 billion in FDI in the country

⁴⁹In line with the top ranked Latin American country in 2018

⁵⁰ Doing Business 2019, World Bank Group

⁵¹ Offices reviewed include: Ireland's Investment Development Agency (IDA), Enterprise Florida, JobsOhio, and Virginia's Economic Development Partnership (VEDP)

⁵²Average of number of jobs created by IDA annually from 2005-2009 equaled 9,700/year. In five years, the U.S. was able to recreate all the jobs lost in the Great Recession, but this was in an environment of economic recovery and population growth. 15% is a more reasonable target for Puerto Rico

⁵³ Best practice examples: VEDP had 375 new investments in 2015; IDA had 244 total approved investments in 2016; VEDP tracked 320 companies counseled or participating in trade events

Achieve a \$20 return in 10 years per dollar invested⁵⁴

In line with best-in-class Caribbean tourism offices, ⁵⁵ by FY2023 **DPR should close Puerto Rico's distance with the highest ranked Latin American country and therefore:**

- Improve World Bank Travel & Tourism Competitiveness Index ranking to at least 43, closing the distance to the highest ranked Latin American country in 2018
- Drive 5% annual growth in direct contribution of tourism to GDP and 5% annual growth in direct contribution to employment ⁵⁶
- Improve tourist service infrastructure score Of 5.4 (2015) by 10% by improving number and quality of lodging services⁵⁷
- Establish exit surveys to measure visitor satisfaction, length of stay and spend for tourists to highlight key areas of improvement and focus for DMO⁵⁸

8.3 Highlighted initiatives to improve the Ease of Doing Business

8.3.1 Initiatives to improve ease of doing business rankings

While the Government has made progress on digitization to date with the creation of the SUI, it must do more work to catch up to the mainland on the time and energy it takes to register, run, or expand a business. Importantly, the Government must focus its efforts on initiatives that have a direct and measurable impact on ease of doing business. The Ease of Doing Business Rankings point to concrete areas that require deep focus, and which are transparently measured by the World Bank. In each area the Government should focus on the specific underlying measures that require attention – typically measures of number of procedures, time, or other burdens.

Make it easier to start a business by creating a one-stop shop, through the Digitize Unified Information System (SUI). The April Certified Fiscal Plan required that the Government target 100% integration into SUI by end of 2018 for the following metrics: Licenses integrated into SUI; cases filed in SUI; cases issued in SUI; concerned entities integrated into SUI; and autonomous municipalities integrated into SUI. This milestone has not been achieved and should be treated with urgency. In addition to migrating government processes toward a "one-stop shop" portal on SUI, the Government should move forms online to whatever extent is possible, including decoupling all non-related procedures from permitting, centralizing and digitizing permits.

Ultimately, digitization can only be effective if it improves the overall processes for applying for and receiving permits and licenses beyond the application process. The Government should improve processes such that applications are processed more quickly, and should establish a time limit on the number of days the Government has to complete the process once an application been submitted.

⁵⁴VEDP estimates \$23 return on each dollar invested in 10 years (\$48 in 20 years). VEDP benchmark adjusted for PPP

 $^{^{55}}$ Such as the Barbados Tourism Product Authority and the Bahamas Ministry of Tourism

⁵⁶Current state: 2.7% direct contribution to GDP and 2.1% of total employment as of 2016. Puerto Rico has historically seen an annual 4% growth rate in travel & tourism's direct contribution to GDP and 4.6% growth rate in travel & tourism's direct contribution to employment (2017). World Travel & Tourism Council, "Travel & Tourism Economic Impact 2017 – Puerto Rico." Barbados set up its Tourism Product Authority in 2014; in 2015, the country saw a 5.4% increase in travel & tourism direct contribution to GDP and 4.3% increase in direct contribution to employment; in 2016, 10.3% increase in tourism GDP and 9.8% increase in tourism employment

⁵⁷10% improvement bring tourist service infrastructure in line with Barbados at 5.9 quality score, top ranked Caribbean nation

⁵⁸ For example, The Bahamas Ministry of Tourism uses high quality exit surveys to track and respond to visitor satisfaction and tourist habits

Through initiatives such as these, the Government can focus on measurable progress against the underlying ease of doing business metrics. In the case of starting a business, this would include the number of procedures involved, the time in days required, and the cost as percentage of income per capita.

Improve ease of investing on-Island, particularly for tourism industry, through construction permitting and property registration reforms integrated with SUI. The Government must streamline the process for business permitting and registrations through a digitized one-stop-shop system for business processes, expanding on work initiated under Act 19. A revised property registration (with improved geographic coverage and transparency of information) must be integrated into the SUI and all permitting requirements must be carried out within the SUI. The SUI should contain clear and coherent rules for permitting, as well as transparency and access to regulations.

Construction permits specifically need a drastic reduction in the time required (e.g., reduce the 120 days, or 73% of total time, taken for municipal evaluation), and processes/procedures (i.e., reducing 22 procedures to at most 10). The process for approving processes should ensure building quality control and safety mechanisms are in place, and also differentiate projects by risk level. In addition to process redesign, the Government should establish a legal time limit on processing applications, after which, if no fault is found, the permit or registration is granted.

Finally, the Government should remove legal barriers to real estate investment. In particular, the Government should reduce the cost of construction permits (e.g., by re-evaluating its municipal construction tax, which represents 80% of total cost), and by deregulating condominium law (which currently requires unanimous approval by all title owners in the condominium).

Improve ease of paying corporate and sales taxes. The Government must develop a one-stop tax registration and payment portal linked to the SUI (or directly within the SUI) in order to reduce time taken to file corporate and sales tax. Hacienda has made some progress to date on automating internal systems but this work must be completed and fully integrated with SUI — to date it has not been possible to e-file and returns have been slow to process. These efforts can focus on reducing the core measures of performance, which include number of payments per year, the hours required per year, and the burden of the tax system after the tax filing.

In addition to these core areas of reform, the Government should pursue the following to strengthen its business environment:

- **Reduce occupational licensing.** Reducing occupational licensing requirements can encourage activity in the formal labor market. Therefore, the Government should take inventory of all occupational licensing requirements and undertake reforms to reduce unnecessary regulations, creating a more open labor market. It will also consider joining U.S. mainland agreements to recognize licenses obtained in other states, such as the Compact for the Temporary Licensure of Professionals. Such an agreement enables professionals with licenses from other states to enter the Puerto Rican labor market without undue barriers.
- **Deregulate on-Island freights.** Reducing the cost of transporting consumer goods and holding inventory will improve the service of carriers and shippers (thereby enhancing competition) and lower the overall cost of doing business on the Island.
- **Improve access to reliable and affordable electricity.** In addition to the above streamlining and digitization initiatives for receiving permits, see Chapter 9 (Energy and Power Regulatory Reform) for further structural reforms to improve reliability.

8.3.2 Invest Puerto Rico (iPR) and Discover Puerto Rico (DPR)

The Government should have planned to make iPR and DPR fully operationalized by the end of FY2018, and to ensure effectiveness, each organization should set specific targets and a plan to evaluate progress.

iPR should begin tracking data (both inputs and outcomes) to inform decision-making—for example, to predict and assess project ROI before providing funds or discontinue projects that are not driving results based on formalized project tracking. Further, iPR should publish quarterly or annual reports, addressing key metrics and any underperformance; hold regular (e.g., quarterly) board meetings; and track/course-correct projects on an ongoing basis, including incorporating feedback from investors and data trends.

DPR should track tourism statistics in Puerto Rico and compare to other tourism industries worldwide.⁵⁹ To determine its own standing, it should conduct regular visitors' surveys to assess satisfaction and quality of tourism services and strive for continuous improvement. Further, DPR should publish quarterly or annual reports addressing key metrics and any underperformance and should also update on targets, course-correct, and incorporate visitor feedback on an ongoing basis.

8.4 Implementation and enforcement of Ease of Doing Business reform

To achieve the 2019 Fiscal Plan's growth projections, ease of doing business reforms must be implemented immediately, with targeted operationalization of most initiatives by the end of FY2019 (**Exhibit 33**). A full set of expected milestones are below. The Government must fulfill these milestones in order to be compliant with the 2019 Fiscal Plan and to give the Oversight Board confidence that they are able to hit relevant savings and growth targets.

Unfortunately, the Government has failed to implement meaningful reform to critical business processes at the same pace as required by the Fiscal Plan. The digitization process for permitting has not been completed, and process redesign has yet to begin. While the Government reports that regulations and license requirements are under consideration, limited legislative change has occurred. iPR and DPR have not met milestones although there has been some progress on hiring and beginning operations. The online tax return system for corporate and sales tax is still not yet fully operational.

Therefore, while robust ease of doing business reform would have been projected to generate approximately \$24 billion in additional revenues by FY2049. However, in light of limited progress described above, the 2019 Fiscal Plan projects that the ease of doing business reforms to which the Government has committed will only generate 0.4% growth for the Island that phases in over two years in FY2022 and FY2023. As a result of this change, the revenue boost from these reforms in now projected to be \$15 billion by FY2049. Further, the Fiscal Plan estimates that there is a one-year lag in these changes having an impact on the economy, and as such the forecasted impact of these reforms has been pushed back a year.

In order to ensure reforms happen in a timely and meaningful manner, the following leading indicators will be measured through quarterly reporting:

- Specific administrative and legislative changes to business processes that reduce number of procedures and amount of time required to register property, to receive a construction permit, to pay taxes and to get electricity
- Average time to receive a permit

⁵⁹For example, utilizing the Tourism Satellite Account tool leveraging economic tourism data

- # of permit applications going through SUI
- Average time to receive a license
- # of private permit inspectors hired
- # of occupations where license required
- # of backlogged inspections
- # of new regulations created
- # of regulations eliminated

EXHIBIT 33: EASE OF DOING BUSINESS REFORM KEY IMPLEMENTATION MILESTONES

reas of focus	Action item	Deadline
	■ Complete design and launch of SBP	June 30, 2018
Streamline /	 100% integration into SBP for (i) licenses, (ii) cases filed, (iii) cases issued, (iv) concerned entities, and (v) autonomous municipalities 	December 31, 2018
Digitize Business	■ Complete comprehensive property registration digitization and integrate to SBP	December 2018
Processes	■ Complete one-stop tax registration / payment portal and link to SBP	December 2019
	Publish annual report on use of SBP	June 30, 2020
	Monitor and continually improve systems	Ongoing
	■ Begin implementation of procedure, requirement, and time consolidation	March 31, 2018
Reform and	Complete redesign and centralization of back-end SPB permitting processes to reduce permitting time	June 30, 2019
Redesign Permitting	■ Complete passage of necessary legislation	March 31, 2019
Processes	■ Create a legal framework for permit application processing timeline	December 31, 2019
	Complete implementation of procedure, requirement, and time consolidation	January 1, 2020
	Conduct annual review of permitting and licensing	Ongoing
Reform	■ Draft and pass legislation (as needed)	March 31, 2018
Regulation	Announce implementation of regulatory reforms (e.g., join stateside occupational licensing agreements)	June 30, 2019
(Occupa-	Conduct annual review of regulation and potential opportunities to strengthen business environment	June 30, 2020
tional Licensing,	Announce updated regulation plan	June 30, 2022
Freights,	Hold quarterly stakeholder outreach meetings with affected sectors to solicit feedback and fine-tune regulation	Ongoing
Condo Law)	Plan procedure, requirement, and time consolidation	Ongoing
	 Initiate diagnostic to evaluate opportunities to improve trade throughput (inclusive of port operations, domestic transport, etc.) to identify improvement opportunities 	September 30, 201
	Complete diagnostic and publish findings	December 31, 2018
Improve	Develop investment and regulatory reform plan based on diagnostic feedback	March 31, 2019
Trading Across		
Borders	Complete passage of any necessary registation	June 30, 2019
	 Begin first phase of capital investment program (i.e., improved border compliance, IT system upgrades) 	July 1, 2019
	Complete implementation of regulatory reform measures	December 31, 2019
	Complete first phase of capital investment program	December 31, 2021
	 Designate Government representative(s) to be project manager with responsibility for driving Doing Business ranking improvements 	September 30, 201
Monitor Key Doing	 Request meeting with World Bank representatives to better understand Doing Business ranking methodology and solicit feedback on areas for improvement 	December 31, 2018
Business Rankings	■ Achieve target of EODB rankings	June 30, 2023
Rankings	Monitor annual performance in Doing Business rankings	Ongoing
	Complete quarterly reports on leading indicators	Ongoing
	Complete CEO search and onboarding	September 30, 201
	Staff team and complete contracts	November 30, 2017
	Complete strategic plan	January 31, 2018
	Ready to go live	March 31, 2018
Invest Puerto Rico	Fully operationalize iPR	June 30, 2018
(iPR)	Develop and implement a performance monitoring framework (i.e., KPIs, interim milestones, etc.)	June 30, 2018
	Publish first annual report on progress	June 30, 2019
	Develop refreshed strategic plan	June 30, 2022
	Track and publish key metrics of success	Ongoing
	Tradit drie pasier key metre di edecede	
	Complete CEO search and onboarding	September 30, 201
	Staff team and complete contracts	November 30, 2017
	Complete strategic plan	January 31, 2018
Discover Puerto Rico	Ready to go live	March 31, 2018
	 Fully operationalize DPR Develop and implement a performance monitoring framework (i.e., KPIs, interim milestones, etc.) 	June 30, 2018 June 30, 2018
		JULIO JU. 2010
	Refresh strategy and marketing plan for Puerto Rico	
		January 1, 2021 June 30, 2021

Chapter 9. ENERGY AND POWER REGULATORY REFORM

Over the next five years, the power sector in Puerto Rico must be transformed and modernized to support the delivery of reliable and affordable power. The Commonwealth must continue to implement a comprehensive energy sector reform to enable a successful transformation and the resulting growth that the 2019 Fiscal Plan projects. The goal of transforming Puerto Rico's power sector is to provide its residents with affordable, reliable, resilient and environmentally compliant power delivered by an efficient and financially sustainable utility. The pillars of this transformation include restructuring the power generation mix to leverage efficient, low-cost sources of power, executing a large-scale capital investment program with federal funds and private sector investments to rebuild and modernize the energy system, and introduce customer and stakeholder accountability by leveraging private knowledge and capital for the management and operation of the transmission and distribution (T&D) System, as well as for the deployment of new generation resources, subject to the oversight of a professional, well-resourced regulator.

A strong and independent energy sector regulator is essential for injecting certainty and stability into the energy market, promoting much needed investments and enforcing compliance with the energy sector transformation's objectives. The long-term sustainability of Puerto Rico's energy sector depends on the lasting presence of a strong, independent, and professional regulator.

9.1 Current state and vision for energy reform

The current regulator of the power sector in Puerto Rico is the Puerto Rico Energy Bureau (PREB). PREB has the responsibility to "regulate, monitor and enforce the energy public policy of the Commonwealth of Puerto Rico."

As Puerto Rico's energy sector is transformed into a vibrant, modern system, PREB will continue to be responsible for regulating, monitoring, and enforcing the energy policy of the Commonwealth of Puerto Rico. To that end, PREB will have regulatory oversight over all participants in Puerto Rico's energy sector.

To fully achieve its purpose, PREB should continue to be independent of the Government, operate under public service ethics and conduct rules and enjoy both substantive and financial independence.

9.1.1 Structure of and funding for the Puerto Rico Energy Bureau

Although administratively located within the Puerto Rico Public Service Regulatory Board (PSRB), PREB's decision-making process should not be subject to direct or indirect review by any other government entity, except for any review under applicable administrative procedure rules. Any staff involved in substantive decision-making should be kept separate and independent from the PSRB and be fully dedicated to matters within PREB's jurisdiction and purview. PREB may, on an annual basis, provide funds to the PSRB to cover administrative and other operational costs, however, PREB's resources should be kept separate and shall not be controlled or placed under the direction of the PSRB.

In line with best practices for regulatory commissions (e.g. California Public Utilities Commission, Hawaii Public Utilities Commission, New York Public Services Commission), PREB is headed by 5 commissioners who serve staggered 6-year terms. The commissioners are appointed based on their technical, professional and/or academic credentials, with potential candidates being identified and appointed through a candidate list developed by a

professional recruitment firm. The commissioners should be supported in their oversight role by a professional civil servant staff that has utility expertise. PREB shall develop and implement a plan for transitioning from its existing employee structure to a structure comprised of no less than 75% civil servant (career) employees and no more than 25% trust employees. This transition should be achieved no later than the end of FY2021. Both, during and after the energy sector reform process, PREB shall have sufficient staff to effectively undertake its duties and responsibilities in a timely and professional manner. The selection, hiring and management of PREB's staff should not be subject to review or approval by any other entity of the Executive or Legislative Branch.

All commission decisions in adjudicatory proceedings should comply with applicable requirements of administrative procedure. Separate from the regulator, there shall be an independent ratepayer advocate, a role currently filled by the *Oficina Independiente de Protección al Consumidor* (OIPC).

PREB's substantive independence should be supported by financial independence. Under current law, PREB's yearly budget is set at \$20 million⁶⁰ and collected through charges assessed on certified energy companies. To provide for a steady and predictable funding source, PREB's enabling act should be amended to provide that PREB's budget shall be funded entirely through rates, as part of the revenue requirement used to determine the T&D System's rates. PREB's funds are then collected by the T&D operator through customer bills and periodically remitted to PREB. This funding mechanism is consistent with the mechanisms used to fund other mainland regulators. Providing for an independent, unencumbered source of income for PREB helps create the conditions for protecting ratepayer interests, increase transparency, and reduce system costs. PREB's budget and funding shall be kept separate and independent from the Commonwealth budget or the budget of any other Commonwealth agency, entity or instrumentality, and neither the Executive nor the Legislative branches shall have authority to modify PREB's budget or reapportion any of PREB's funds without PREB's prior consent.

9.1.2 Mandate and authorities for the strengthened regulator

To be effective, PREB must have a clear mandate to deliver reliable, safe power at an affordable cost. Accordingly, PREB shall have, among others, the following tools and authorities:

- Review and approval of rate cases filed by the electric service companies, including ability to mandate target rates and the use of rate structure and design tools that create predictability, minimize risk and "rate shock", and create incentives to support equitability, economic development, and economically efficient rate designs
- Evaluation and approval of an electric service company's performance, establishment of appropriate performance incentives and total compensation structures, including, when applicable, a reasonable, market-based return on equity
- Review and approval of integrated resource plans, which will guide generation and capacity needs and approval of purchased power agreements and other contract terms
- Support for and integration of renewables, distributed generation and new energy technologies as appropriate and consistent with the New Fiscal Plan for PREPA (e.g., through IRP process and enforcement of applicable renewable portfolio standards)
- Mechanisms providing for efficient enforcement of final orders and determinations
- Solicitation of input from public related to rates, IRP, and transformation process, with such input to be shared with the Oversight Board while it is in existence

⁶⁰ Amount in line with other jurisdictions; the Hawaii Public Utilities Commission had revenues of \$19M in FY2017 to serve a population of 1.4 million.

9.2 Regulatory reform implementation and transition

Until the transformation of the energy system is complete, and as applicable, the role of the Oversight Board with respect to energy sector regulation should be as follows based on its rights, powers, and duties in PROMESA:

- *IRP:* The Oversight Board approves revenue requirements and expenditures, including a capital plan, in the New Fiscal Plan for PREPA. PREPA's Fiscal Plan should be informed by the results of the IRP and should provide a clear framework for executing the modernization of generation resources.
- Budget and rate-making: The Oversight Board approves a yearly budget for PREPA that aligns with PREPA's Fiscal Plan and thus should align with revenue requirements and expenditures.
- Utility debt: The Oversight Board approves restructuring of existing debt through the Plan of Adjustment for PREPA.
- *Transformation:* As the representative of PREPA in Title III, the Oversight Board has the exclusive right to file a plan of adjustment, which will contain the transformation agreements.

The role of the PREB during the transition period should be as follows:

- *IRP:* PREB will approve the IRP. The IRP process shall be open and transparent so that third parties can understand inputs and methodologies behind each scenario and be able to participate and attend hearings to understand tradeoffs and decisions driving approval of the final capital plan and revenue requirement.
- *Budget and rate-making:* PREB shall authorize rates (either formulaic or on an expedited manner) which align with the budget as certified by the Oversight Board.
- *Utility debt:* No additional authorities because debt service implied by the current rate case will be superseded by the Oversight Board-approved budget and Plan of Adjustment.
- Other: PREB will continue to exercise its duties and responsibilities as outlined in its
 enabling laws except when doing so is inconsistent with the powers and authorities
 delegated to the Oversight Board under PROMESA.

The Oversight Board shall retain its powers as long as PREPA remains a covered entity under PROMESA.

9.3 Contributions in-lieu of taxes

PREPA also intends to reform the contributions in-lieu of taxes program (CILT) in order to strengthen the utility's financial position and ultimately lower rates. ⁶¹ PREB has approved a pass-through rider to fund the revised CILT program. PREPA, PREB, and the Commonwealth should collaborate with municipalities and other stakeholders to implement and enforce the revised CILT program. Efforts should be made to ensure compliance with the program, whereby municipal power consumption counted towards a contribution in-lieu of taxes (effectively power exempt from payment) is capped at an agreed level and PREPA is reimbursed for any power sales to municipalities above the established cap.

⁶¹ PREPA fiscal plan, section VIII

9.4 Implementation and enforcement of energy and power regulatory reform

To achieve the 2019 Fiscal Plan's savings projections, energy and power regulatory reform must be implemented immediately according to the schedule described in **Exhibit 34**. The Government must fulfill these milestones in order to be compliant with the 2019 Fiscal Plan and to give the Oversight Board confidence that they are able to hit relevant savings and growth targets. Without such reforms, the revenue that would be lost over the time of 2019 Fiscal Plan would need to be found elsewhere in the budget.

EXHIBIT 34: ENERGY AND POWER REGULATORY REFORM KEY IMPLEMENTATION MILESTONES

Areas of focus	Action item	Responsible party	Deadline
	Provide interim feedback on Integrated Resource Plan (IRP)	PREB	August 14, 2018
	Remove CW government approval needed for PREB staff appointments	CW government	December 17, 2018
Reform regulations	Appoint the remaining PREB commissioner to serve staggered six-year terms	CW government	Ongoing
	Develop and establish regulatory framework as described in Law 120-2018	CW government	December 17, 2018
	 Revise charter legislation to provide dedicated funding for power sector regulation that provides regulator with annual budget of \$20 million in line with benchmark 	CW Government	December 31, 2018
	 Increase number of PREB staff in line with appropriate benchmarks 	PREB	May 15, 2019
	 Increase percentage of technical, managerial, and administrate staff to match appropriate benchmarks 	PREB	May 15, 2019
	Become cash-flow positive on a month-by-month basis	PREPA	Ongoing
	Decrease operational costs by implementing operational efficiency measures	PREPA	December 31, 2019
	Repay all outstanding AR balances to PREPA	PREPA/CW government	December 31, 2019
Transform	Enforce revised CILT program	PREPA/PREB/CW government	December 31, 2019
PREPA	Host IRP filing with PREB	PREPA	January 31, 2019
	 Improve generation costs by switching to low-cost, clean, and resilient F&PP 	PREPA	Ongoing through June 30, 2023
	Decrease rates to below 20c in line with conclusion of transformation	PREPA	Ongoing through June 30, 2023
	 Reduce SAIFI and SAIDI in line with comparable benchmarks by developing a modernized, resilient, reliable grid 	PREPA	Ongoing through June 30, 2023
	 Perform market sounding to collect feedback on interests and concerns from interested parties 	FOMB, P3	Ongoing
Conduct	Initiate due diligence phase and provide requested information from bidders	FOMB, P3	Ongoing
transaction	Select winning bidder for T&D concession	FOMB, P3	September 25, 2019
	Close transactions (i.e., generation asset privatization, T&D concession)	FOMB, P3	April, 2020

Chapter 10. INFRASTRUCTURE REFORM AND CAPITAL INVESTMENT

Relative to the mainland U.S., Puerto Rico's infrastructure outcomes rank near the bottom in quality and operating performance. In particular, poor transport infrastructure has contributed to congestion and thus impacted the ease of doing business on the Island. The capital investments enabled by post-Maria federal recovery funding offer a unique opportunity to make transformational investments that support economic development. This moment is unique as FEMA has expanded overall flexibility and willingness to support more transformational investments under Section 428 (under Title IV of the Stafford Act).

10.1 Current state of infrastructure and capital investment

Infrastructure investment as a percentage of GDP decreased from 3.3% in 2000 to 1.4% in 2014^{62} , indicating a lack of recent experience in large-scale building. The Government also has a history of failed large-scale projects. For example, Tren Urbano was scheduled to open on July 1, 2001 after beginning construction in 1996; it finally opened in 2005 and the budget for the project increased more than 60%, from \$1.38 billion to \$2.25 billion.

In addition to the challenges with infrastructure delivery and maintenance, the poor state of transport related infrastructure is a key constraint on mobility. Puerto Rico is ranked 51st out of 52 jurisdictions 63 for quality of roads (percentage of roads in poor conditions) and is ranked 45th out of 52 for congestion of roads 64 . Urban congestion is a particular problem in San Juan and on major highways. San Juan is the 150th most congested city in the world according to the INRIX 2018 Traffic Scorecard Report with 102 hours yearly lost in congestion during peak commute periods compared to free-flow conditions. 65 It incurs daily delays of $\sim\!54,000$ hours on average, costing $\sim\!5165$ million annually in commuter cost, without including the impact of congestion on the transport of goods, or the costs of unreliability or lack of safety.

Improving traffic on major highways along which goods travel, such as PR-52 and PR-18, is critical to enhancing growth. A 25% reduction in travel time for trips coming into and out of the CBD can reduce travel cost by over 6% (NCHRP Report 463). Investments to reduce congestion should prioritize the most economically important trips, or provide alternative travel capacity to enable access despite congestion (Sweet, 2013). Targeted investments, such as "smart intersections", dynamic tolls and reversible lanes using movable barriers will reduce delays on key routes and journeys, and facilitate economic growth⁶⁶.

Meanwhile, there are several critical elements that Puerto Rico should include to capitalize on the transformational opportunity afforded by historic federal capital funding.

- a) **Build organizational structures and capabilities** in the Government to prioritize and deliver projects faster and at lower cost;
- b) **Prioritize projects with the highest long-term benefit-cost ratios** taking account a variety of monetizable and non-monetizable benefits; and
- c) Systematically leverage private sector capabilities to improve overall public outcomes

10.2 Organizational structures and capabilities

When creating a reconstruction plan, it is imperative to build a central capability with the skills and mandate to design an overall recovery portfolio and oversee efficient project delivery. As such, the Government created the Central Office for Recovery, Reconstruction and Resiliency (COR3) as a Division of the P3 Authority to lead the coordination, development, and execution of long-term recovery and reconstruction efforts. The COR3 has been created based on leading practices used in many jurisdictions, including New Jersey, Louisiana, New York and New

⁶² Puerto Rico Planning Board

⁶³ Ranked among the states, Puerto Rico, and Washington D.C.

⁶⁴ U.S. Bureau of Transportation Statistics

⁶⁵ http://inrix.com/scorecard/

⁶⁶ See, Jamal Haidar, "The impact of business regulatory reforms on economic growth," Journal of the Japanese and International Economies, Vol 26, 2012, pp. 285-307. In addition, there are several studies that review the impact of decongestion of roads on growth. Two examples are: New Zealand Institute of Economic Research, Benefits from Auckland road decongestion, July 2017, and Clifford Winston and Quentin Karpilow, A New Route to Increasing Economic Growth Reducing Highway Congestion with Autonomous Vehicles, Mercatus Working Paper, January 2017

Zealand, to ensure higher accountability, transparency and coordination of disaster recovery efforts.

The COR3 should commit itself to a decision-making framework that incorporates not only the degree of damage, but also the future level of service required from the asset and future risks to that asset, when deciding how that asset should be rebuilt. New York and New Jersey received ~\$10 billion in Section 428 funding post Hurricane Sandy, which decreased their vulnerability and helped ensure that capital dollars spent then did not simply have to be respent cleaning up after the next storm. The COR3 should aggressively pursue next level resiliency activities with federal dollars, to ensure that Puerto Rico's critical assets are sufficiently protected from future hazards.

Specific COR3 activities should include:

- Developing, presenting and administering recovery action plans
- Financing, executing and effecting infrastructure projects related to recovery efforts
- Monitoring contracting for compliance and effectiveness purposes
- Implementing and enforce checks and balances for procurement and approval of contracts and payments
- Coordinating and channeling all efforts and activities of the Government related to recovery efforts
- Monitoring capital project delivery, focused on major projects, to ensure on-time, on-budget delivery, highlight risks of cost overrun or delay, and create transparency for overall capital program delivery, including recovery spending led by COR3 or another Commonwealth entity with capital delivery expertise.
- Capital program monitoring should include publicly publishing the list of projects, use of funds considered, and project level information including description and justification, cost, and impact on future operating budget

10.3 Prioritization and delivery

The Government should employ infrastructure delivery best practices (e.g. prioritization of projects for economic impact, fast-track permitting, procurement reform). Competitive processes need to be engineered into the capital budgeting process for Puerto Rico. Competition between capital projects helps assure that scarce resources are used effectively and equitably. Capital decisions must be sufficiently insulated from ad hoc political pressures to promote effective comparison and tradeoffs. This is achieved by establishing appropriate processes, procedures, definitions, information and analytic requirements, roles of actors, submission requirements, review criteria and programming responsibilities. All of these require formal capital budgeting practices and the elimination of the ad hoc practices.

These best practices improve efficiency and transparency and should be applied to all areas of infrastructure expenditure of the Commonwealth including: reconstruction, construction and maintenance of government owned assets, and procurement of infrastructure through public corporations and Public-Private Partnerships (P3s).

The Government should pursue five sub-strategies:

Set Commonwealth infrastructure priorities to guide investment

- Set target outcomes to guide prioritization of projects
- Develop clear, systematic cost-benefit analysis and quantitative scoring to prioritize projects based on return on public investment and the ability to implement

■ Each request should meet certain criteria and include detailed project justifications, cost estimates, and other information requisite for a thorough review.

Accelerate the pre-construction process

- Identify opportunities for local review and permitting, for as many projects as possible, to avoid federal delays
- For projects requiring local review, revisit existing process to reduce hurdles, and ease of meeting them, wherever possible
- Where federal approval is needed, focus on: clarifying decision rights and confirming processes with all major stakeholders; harmonizing local processes to match federal processes and seeking waivers where applicable; ensuring transparency and clarity from Federal Government on where projects are in the pipeline; and utilizing Title V of PROMESA

Build sustainable funding models and financing strategies

- Leverage external capital, by expanding PPPs and access to federal credit (e.g., TIFIA) and grant (e.g., INFRA) programs
- Increase bankability, and eligibility for participation in a PPP by deploying monetary and non-monetary incentives (e.g., recyclability of proceeds from asset monetization, including monetization of Government-owned real estate to support the revenue models for PPPs)
- Provide support to de-risk greenfield investment (e.g., reduction of early stage demand risk)

Promote procurement and delivery best practices

For projects that receive Commonwealth funding, ensure such projects:

- Develop an aligned owner organization with streamlined processes (e.g., early procurement involvement, accountable owner team oversight)
- Build an effective contracting strategy (e.g., tailored bidding process and pricing models, change order management tools)
- Utilize advanced procurement tools and approaches (e.g., rigorous clean sheet models, quantified view of Total Cost of Ownership drivers)
- Implement lean construction and digital techniques

Build the infrastructure of tomorrow

- Identify innovative technologies (e.g., automotive transformations, drones, new tunnel creation methods, the Internet of Things) and develop a strategy to actively promote them (e.g., AV pilot test zones), or at least find a way to not stifle their development (e.g., job trainings for displaced workers)
- Critically evaluate major new investments against future trends, to avoid disruption by innovation (e.g., avoid the buildout of excessive parking given increase in shared mobility and growth of autonomous vehicles)

10.4 Implementation of infrastructure reform

The implementation timeline for infrastructure reform can be found below (**Exhibit 35**). The Government must fulfill these milestones in order to be compliant with the 2019 Fiscal Plan.

EXHIBIT 35: INFRASTRUCTURE REFORM KEY IMPLEMENTATION MILESTONES

Measure	Milestone	Deadline
	Finalize economic and disaster recovery plan	August 8, 2018
Countries Office of	Finalize monitoring program for compliance with procurement, contracting, and payment requirements	August 8, 2018
Central Office of Recovery,	Fully staff team and complete COR3 operational contracts	August 8, 2018
Reconstruction, and	Deploy a proven grant-management software system	August 8, 2018
Resilience (COR3)	Coordinate and channel all efforts and activities of the Government related to recovery efforts	Ongoing
	Issue annual report on status of implementation of recovery plan	Annually, Augus 2019-2023
Set Commonwealth	Set target outcomes to guide prioritization	December 31, 2018
Infrastructure Priorities to Guide	Develop clear, systemic CBA to grade projects	Sep 30, 2019
nvestment	Submit list of prioritized projects based on new methodology	December 31 2019, Ongoing
	Conduct diagnostic of pre-construction process (i.e., key steps, parties involved, and bottlenecks / gaps)	December 31, 2018
	Identify initiatives based on lean best practices to accelerate pre-construction process and reduce time and cost to delivery	March 31, 2019
Accelerate the Pre-	Submit roadmap for initiatives to improve pre-construction process	June 30, 2019
Construction Process	Identify opportunities for local project review	June 30, 2019
	Segment projects by funding source to accelerate delivery	March 31, 2019
	Revisit local permitting requirements (non-Title V)	June 30, 2019
	Implement improved federal interaction model	Dec 31, 2019
	Conduct diagnostic to identify opportunities to leverage external capital (e.g., level of PPPs and concessions relative to benchmarks), including high potential asset classes and assets	December 31, 2018
	Build capabilities and assign dedicated CRRO team member responsible for identifying and promoting FDI	September 30, 2018
	Undertake external capital raising strategy to execute on opportunities for specific assets	March 31, 2019
Build Sustainable Funding Models and	Develop FDI promotion strategy (e.g., priority sectors, sources of investment) and execute initiatives to promote FDI	March 31, 2019
Financing Strategies	Release annual reports on relative performance on FDI and opportunities to enhance	December 31 2019, ongoing
	Undertake project review to determine opportunities to increase bankability to attract private funds (e.g., increasing or creating new revenue streams, transfer risk)	December 31, 2018
	Execute on strategy to improve project bankability for priority projects (large magnitude or high impact)	September 30, 2020
	Determine opportunities to improve use and adoption of more effective contracting strategies (e.g., CHICA)	December 31, 2018
	Develop toolkit to maximize efficiencies	March 31, 2019
Promote Procurement and Delivery Best Practices	Identify and pilot new tools for improved procurement delivery (e.g., contractor rating, design-build contracts for targeted assets)	June 30, 2019
racuces	Ensure tracking of procurement and project level performance and create performance and outcomes-based monitoring (e.g., rewards/penalties for meeting or missing time thresholds)	December 31, 2019
	Review impact of each tool based on data and iterate	June 30, 2020
	Identify resiliency upgrades to existing and new infrastructure	June 30, 2018
	Prioritize and invest in resiliency upgrades based on schedule	December 31, 2018
	Identify innovative technologies, promotion strategy	December 31, 2019
Build the Infrastructure of Tomorrow	Review potential disruption to various infrastructure investments and asset classes and create methodology or periodic review to determine how to promote investment in high growth areas and ensure limited investment in areas that will have lower benefit given trends	June 30, 2020
	Completion of dynamic toll viaducts by HTA	July 31, 2023
	Completion of dynamic toll lanes by HTA	July 31, 2023
	Completion of signal system improvements by HTA	July 31, 2023

PART IV: Transforming government to better serve the Island

In addition to structural reforms, the Government must also implement fiscal measures to create a sustainable fiscal future for Puerto Rico. Fiscal reforms should reduce costs while maintaining or improving the quality of important services. The wide range of government efficiency initiatives shall target an increase in revenues through new and more efficient collections activities, while decreasing government expenditures by ensuring reasonable usage of resources.

Making fiscal choices limited resources requires focus. As such, in addition to the investments made in FY2019 across teachers, school directors, and police, the 2019 Fiscal Plan includes investments in three key areas: public safety, education, and health.

Investments in police compensation and equipment

Tantamount among these investments is an effort to make police sworn officer compensation more competitive given the significant attrition PRPB has experienced since FY2018. Therefore, the 2019 Fiscal Plan includes a salary and required benefits increase of 30% (~\$11,500) over two years. The 2019 Fiscal Plan also includes \$250 per sworn officer per year for life and disability insurance, contributions for Social Security starting in FY2020, and \$122 million per year from FY2019 to FY2021 for police officers who are owed payment for past services. In addition to investments in compensation, the 2019 Fiscal Plan provides \$42 million in capital expenditures funds in FY2020. **Exhibit 36** details the focus and magnitude of these investments over the course of the 2019 Fiscal Plan.

EXHIBIT 36: 2019 FISCAL PLAN INVESTMENTS IN POLICE

Significant investments in Police compensation and equipment to promote public safety on Island



Investments in healthcare, education, and public safety

In addition to investments in police, the 2019 Fiscal Plan includes investments in other priority areas across public safety, healthcare, and education (**Exhibit 37**).

EXHIBIT 37: 2019 FISCAL PLAN INVESTMENTS IN FISCAL PRIORITIES

Highlights of investments in other high priority spending areas				
		1	\$1.4 B	Increase in funding across FY2020-2024 to improve stability within the healthcare system
		√	\$25+ M	Investment in FY2020 to enable the Comprehensive Cancer Center to become fully operational
	^	✓	\$15+ M	Investment annually to maintain nurse staffing levels
Healthcare		✓	\$12 M	Over FY2020 and FY2021 to enable the Psychiatric Hospital to increase standards of care for Medicare certification
		✓	\$4 M	For capital expenditures for medical, office and air conditioning equipment
		√	\$2 M	Investment in the Cardiovascular Center of Puerto Rico for purchases of medical products and materials
Education	.	✓	\$14 M	For salary increases of \$500 for teachers and directors annually starting in FY2020 (in addition to FY2019 salary increases across teachers and directors)
	المحد	✓	\$39 M	Investment in the UPR scholarship , amounting to \$214 million in scholarship funding between FY2019-2024
		~	\$1 M	For salary increases of \$500 per firefighter annually starting in FY2020
Firefighters		✓	\$14 M	In capital expenditures for fire pumps, vans and trucks
		✓	\$2 M	Investment for safety equipment and materials in FY2020
Forensics		✓	\$4.5 M	Personnel investment annually to allow for 95 new employees to decrease backlog of cases
Institute		✓	\$750 K	Investment in laboratory equipment and materials annually

Fiscal measures

Office of the CFO (Chapter 11). The Office of the CFO, a function of Hacienda, ("OCFO"), will also be responsible for—and crucial to achieving—a variety of reforms to ensure the responsible financial stewardship of the Island's resources.

Agency Efficiencies (Chapter 12). A new model for government operations will "right-size" the Government through agency consolidation and reduction and/or elimination of government services. It includes comprehensive reform initiatives in the Departments of Education, Health, Public Safety, Corrections, Hacienda / OCFO, and Economic Development, as well as consolidations and reductions within the long tail of other agencies. Agency efficiency measures must result in \$1,556 million in run-rate savings by FY2024.

Healthcare Reform (*Chapter 13*). Healthcare measures seek to reduce the rate of healthcare cost inflation through a comprehensive new healthcare model that prioritizes quality relative to cost and must result in \$638 million in run-rate savings by FY2024, projected to grow with healthcare inflation.

Tax Compliance and Fees Enhancement (Chapter 14). Tax compliance initiatives involve employing technology and other innovative practices, as well as implementing new taxes, to capture revenue from under-leveraged sources. These initiatives must increase runrate revenues by \$509 million by FY2024.

Reduction of Appropriations (*Chapter 15*). The central Government will decrease appropriations granted to municipalities and UPR, which must result in \$499 million in runrate savings by FY2024.

Pensions Reform (*Chapter 16*). Improvements to the financial stability of public employees' retirement funds must result in \$186 million of run-rate savings by FY2024.

Together, these measures are crucial to the structural balance of Puerto Rico's economy, and are projected to result in over \$13 billion over FY2019-2024 and over \$119 billion by Fiscal Year 2049 (**Exhibit 38**).

Impact of fiscal measures1, \$M Pensions Reform Healthcare Reform Agency Efficiencies Tax Compliance and Fees Enhancement Reduction of Subsidies EITC 119,421 7,334 13.533 694 55,277 6.819 29,371 3,029 2,423 2,728 186 2.269 1,557 842 2.518 17.272 638 84 -204 FY19-49 FY21 FY22 FY23 FY24 FY19-24 FY18 **FY19** FY20

EXHIBIT 38: IMPACT OF FISCAL MEASURES SAVINGS AND REVENUES

Chapter 11. OFFICE OF THE CFO

One of the highest priorities of the Government transformation will be the implementation of the transformed Office of the CFO. Despite attempts to better coordinate Puerto Rico's fiscal functions through Executive Orders 2013-007 and 2017-033, among other actions, the Government's current financial management functions remain decentralized, fragmented, obsolete, and in need of improvement. This must be solved by the establishment of a strong, centralized Office of the Chief Financial Officer for Puerto Rico ("OCFO") into the executive branch of Government. While the government has taken some action to establish the OCFO, formal legislation for the office's structure and governance has not been submitted or approved. Further action must be prioritized to make up for delays in the office's implementation plan and the resulting impact on staffing levels, timely decision-making and achievement of savings.

By centralizing all financial management functions per the 2019 Fiscal Plan, the OCFO would improve fiscal governance and forecasting, increase transparency, substantiate accountability, heighten internal controls, and improve stakeholder confidence in Puerto Rico's financial management. Most importantly, it will enable the Government to achieve fiscal responsibility and restore access to the capital markets, two cornerstones of PROMESA.

Core objectives of the OCFO must be as follows:

- A) Centralize treasury and liquidity management
- B) Enhance budget development process and improve monitoring / performance tracking
- C) Drive standardization and integration of financial IT systems
- D) Ensure compliance with procurement, contracts, pensions, and human resources management policies
- E) Enhanced control mechanisms and oversight
- F) Improve timeliness of CAFR (Comprehensive Annual Financial Report) and financial reporting
- G) Centralize and validate management of funds, debt, and other financial transactions

11.1 Responsibilities and actions of the OCFO

11.1.1 Responsibilities

To carry out the above objectives, the OCFO must be endowed with the following responsibilities:

- The OCFO shall act as the central authority over finance, budget, HR, audit, procurement, cash management, and debt issuance for all entities that receive support from the General Fund or otherwise depend on the Government's taxing authority
- The OCFO shall have the ability to remove any fiscal officer for violations of, or noncompliance with, the law, including failure to provide timely and accurate fiscal and financial information
- The OCFO shall oversee the transition to modified accrual accounting standards

To enable this level of centralized control, these functions must be consolidated under a single individual. The Government has proposed that this person be the Chief Financial Officer, who now oversees OCFO and Hacienda. Other offices would then be merged into Hacienda and subsequently eliminated to create Hacienda / OCFO. These agencies include, but are not limited to: Treasury (consolidated, not eliminated), OMB, GDB 67 , OATRH, and GSA 68 . All other fiscal functions of any departments, agencies, and instrumentalities that receive support from the General Fund or otherwise rely on the Central Government's taxing authority would all fall under the OCFO's authority.

A) Centralize treasury and liquidity management

- Enforce and manage a consolidated Treasury Single Account for the Government; this
 involves consolidating visibility and control of all Government bank accounts,
 including CU accounts at private banks and creating a true Treasury Single Account.
 All other public entities should maintain zero balance sweep accounts
- Serve as the sole authority for new bank account creation and closure, as well as ongoing and ad-hoc liquidity reporting, monitoring and analysis. The OCFO must rationalize the bank account portfolio, optimize cash pooling/daily cash sweeps and treasury operations, and implement uniform accounts payable and disbursement prioritization policies, processes and reports

-

⁶⁷ Scheduled to be liquidated

⁶⁸ AAFAF remains a separate entity per Government plans as of May 2019 but is included in OCFO agency efficiencies section for presentational purposesd

B) Enhance budget development process and improve monitoring and performance tracking

- Comply with the recently established Oversight Board budget guidelines and timeline to develop a budget that is consistent with the 2019 Fiscal Plan and easily traceable to the 2019 Fiscal Plan and the audited financials
- Forecast and manage receipt seasonality
- Oversee all tax decrees and tax agreements issues
- Operationalize the budget in the financial system to ensure consistency between accounts and facilitate monitoring of those accounts
- Estimate, protect, and enhance collections and revenue streams, and establish budgetary priorities and oversight, including effective expenditure controls and procurement reform

C) Drive standardization and integration of financial IT systems

 Comply with the recently established Oversight Board budget guidelines and timeline to develop a budget that is consistent with the 2019 Fiscal Plan and easily traceable to the 2019 Fiscal Plan and the audited financials

D) Ensure compliance with procurement, unified contracts, pensions, and human resources management policies

- Certify all contracts, bills, invoices, payroll, and other evidences of claims, demands or charges related to the central Government and all entities reliant on the Government's taxing authority, including prescribing forms of receipts, vouchers, bills and claims to be used by all agencies
- Manage centralized health insurance procurement and policy management
- Oversee human resources as well as all governmental payroll operations and all government-related financial transactions. The office must have the sole responsibility within the Government for reforming personnel policies, including the renegotiation of existing collective bargaining agreements ("CBAs") consistent with the 2019 Fiscal Plan objective to achieve budget savings and efficiencies, ensure enhanced delivery of governmental services, and negotiate all future CBAs to achieve the same ongoing results
- Implement uniform time, attendance, and overtime processes and payroll controls and reporting
- Implement the Single Employer Program to enable mobility of employees to fill critical needs

E) Improve oversight of Special Revenue Funds through enhanced control mechanisms.

 Implement processes to improve responsible stewardship of Puerto Rico's Special Revenue Funds. Additionally, ensure all dedicated revenue streams attributable to SRF have their funds first deposited in the newly established Treasury Single Account

F) Improve timeliness of CAFR and financial reporting

- Publish the FY2017 CAFR by December 2019 and the FY2018 CAFR by March 2020, and manage these to completion by resolving any issues that have caused the multiple delays to date
- Implement a new process for the publishing of the FY2018 and subsequent CAFRs within the established regulatory timeframes, and drive improvements in the process and quality of the data provided. All releases should implement the modified-accrual basis of accounting as required in PROMESA and leverage the new forecasting, esettlement, and analytics capabilities to support all OCFO functions
- Enact effective 2019 Fiscal Plan measures implementation forecasting and actuals reporting
- Supervise property tax assessment reforms, prepare tax maps, and provide notice of taxes and special assessments

G) Centralize and validate management of funds, transactions, and other financial transactions

- Maintain custody of all public funds, investments, and cash, and administer cash management programs to invest surplus cash
- Facilitate long-term and short-term borrowing programs
- Maintain control and accountability over all funds, property, and other assets controlled or managed by the Government, and oversee all tax decrees and tax agreements issued
- Publish an annual Tax Expenditure Report that identifies and quantifies all tax expenditures (including all tax exclusions, exemptions, adjustments, deductions, subtractions, credits, abatements, deferrals, rebates and special rules)

11.2 Implementation and enforcement plan

While Executive Orders can facilitate some of the initial reforms required, the OCFO's authorities should ultimately be established through a comprehensive statutory overhaul. Such legislation must conform to the 2019 Fiscal Plan and PROMESA. **Exhibit 39** shows the milestones required to achieve the transformation and savings that the Oversight Board expects as part of the creation of the OCFO; further, the OCFO will be responsible for a number of implementation and fiscal controls / reporting, which is outlined in Chapter 17.

While encouraging first steps have been taken towards the implementation of the OCFO by appointing a single individual to have accountability for revenues and expenditures, the legislative and managerial work required to consolidate responsibility into this office remains to be done. Given delays, the December 31, 2019 deadline for fully consolidating component agencies is at risk.

EXHIBIT 39: OCFO / HACIENDA KEY IMPLEMENTATION MILESTONES

Areas of focus	Action item	Deadline
	Draft and pass legislation (as necessary) in conformance with both the 2019 Fiscal Plan and PROMESA	June 30, 2018
OCFO Establishment	Fully staff team to manage consolidation program	September 30, 201
	Fully consolidate component agencies, including, but not limited to, (i) Treasury (consolidated, but not eliminated), (ii) OMB, (iii) GDB (until liquidation), (iv) OATRH, and (v) GSA, into OCFO	December 31, 2019
	Submit revised forecast of General Fund net revenues for the current fiscal year based on actual revenues in the prior fiscal quarter (4Q FY2018) and notify the revision to the Director of the OMB, the Governor and the Oversight Board	August15,2018
	Publish all Government contracts and change orders in their entirety on the Office of the Comptroller's website	September 30, 201
Fiscal Controls and Reporting	Disburse 2.5% appropriations withholding based on actual revenue performance in the first sixmonths of the current fiscal year (FY 2019)	April 1, 2019
	Update systems and reporting mechanisms	June 30, 2020
	Review controls and reporting and compare to best practices	Ongoing
	Consolidate visibility and control of all Government bank accounts, including Component Unit accounts at private banks	June 30, 2018
	Establish a true Treasury Single Account	June 30, 2018
	Enforce policy of zero balance sweep accounts at all other public entities	June 30, 2018
Treasury and Liquidity Management	Designate and empower the OCFO as the sole authority for new bank account creation and closure, as well as ongoing and ad-hoc liquidity reporting, monitoring, and analysis	June 30, 2018
Centralization	Rationalize bank account portfolio, optimize cash pooling/daily cash sweeps, and streamline treasury operations	September 30, 201
	Implement uniform accounts payable and disbursement prioritization policies, processes, and reports	September 30, 201
	Publish reports on ongoing accounts	Ongoing
Budget Development	Operation alize budget for current fiscal year (FY2019) in the financial system to ensure consistency between accounts and facilitate monitoring of those accounts	July 31, 2018
and Monitoring Performance	Define reporting required annually	July 31, 2019
Tracking	Finalize system updates	July 31, 2022
	Finalize plan for upgrade and standardization of accounting and IT systems	June 30, 2018
Standardiza-	Release RFP for proposed program	June 30, 2018
ion and ntegration of	Finalize and sign contract with selected vendor	September 30, 201
Financial IT Systems	Fully implement upgrade and standardization of accounting and IT systems across all government agencies	June 30, 2019
	Conduct maintenance of IT systems	Ongoing
	Designate the OCFO as having sole responsibility for reforming personnel policies, including the (re)negotiation of all existing and future collective bargaining agreements (CBAs)	June 30, 2018
Procurement,	Standardize forms for receipts, vouchers, bills and claims to be used by all government agencies	June 30, 2018
Contract, Pension, and	Establish and manage a centralized insurance procurement and policy management system for all government agencies	September 30, 2018
HR Compliance	Implement uniform time and attendance processes, and payroll controls and reporting	December 31, 2018
	Complete annual procurement contract review	June 30, 2020
	Complete ongoing compliance reporting	Ongoing
Improve	Establish a clear timeline to publish the FY2015, FY2016, and FY2017 CAFRs and manage it to completion as soon as possible	June 30, 2018
Timeliness of CAFR (Com- prehensive	Implement a new process for the publishing of the FY2018 and subsequent CAFRs within the established regulatory timeframes (and using the modified-accrual basis of accounting required by PROMESA)	December 31, 2018
Annual Finan- cial Report)	$Deploy forecasting \ and \ reporting \ tools \ to \ track \ progress \ and \ performance \ of \ implementation \ measures$	December 31, 2018
and Financial Reporting	Publish report for FY19	December 31, 2019
3	Review of reporting process	Ongoing
	Establish and maintain OCFO custody of all public funds, investments, and cash	June 30, 2018
Centralize and Validate Management	Establish and maintain OCFO control and accountability over all funds, property, and other assets controlled or managed by the Government	June 30, 2018
of Funds, Debt, and	Enact cash management programs to invest surplus cash	September 30, 2018
Other Financial Transactions	Publish an annual Tax Expenditure Report that identifies and quantifies all tax expenditures (including all tax exclusions, exemptions, adjustments, deductions, subtractions, credits, abatements, deferrals, rebates and special rules.)	September 30, 2018
Transactions	Publish annual reports on tax expenditure	Ongoing

Chapter 12. AGENCY EFFICIENCIES

12.1 Improving agency operational expenditures

As of FY2018, the Government had approximately ~116,500 employees⁶⁹ across 114 Executive Branch government agencies, as well as agencies within the Legislative and Judicial branches (excluding large instrumentalities, e.g., PREPA, PRASA, HTA UPR, COSSEC, GDB)⁷⁰. With a total FY2018 General Fund budget of over \$9 billion, these agencies utilize **personnel and non-personnel resources that are outsized compared to the actual service needs of the people of Puerto Rico**. Compared with states serving similar populations, Puerto Rico remains an outlier in terms of sheer number of agencies: for example, as of 2018 Iowa only had 36 state agencies and Connecticut had 78. In addition, there are countless examples of **subpar service delivery** across the Government. For instance, despite having 5+ agencies primarily dedicated towards the financial stewardship of the Island, the Government has been unable to report consistently accurate financial statements on a timely basis. In addition, Puerto Rico's education system has consistently delivered unsatisfactory student outcomes, including below-U.S. mainland graduation rates and standardized test scores are far below basic proficiency.

Prior to 2016, when the Oversight Board began promoting fiscal sustainability, the level of governmental spending in Puerto Rico had not seen any significant decline even though Puerto Rico's population fell by 12% from 2007 to 2017 (prior to Hurricanes Irma and Maria) 71 . In fact, **Puerto Rico remains an outlier in terms of the number of residents employed by the state government**, with ~20% of those currently employed working for the government (e.g., in a "governmental position") 72 , placing Puerto Rico in the top 10^{th} percentile of U.S. states for percentage of residents employed by state government 73 .

Moving forward, the right-sized Government of the future should wherever possible reflect mainland U.S. benchmarks in terms of both number of agencies and size of agencies themselves to **deliver services in as efficient a manner as possible**. As part of the new Government model, the Government should **consolidate the 114 agencies into no more than 42 agency groupings and independent agencies.** In some cases, the consolidations are designed to better focus the competing efforts of multiple agencies, such as the Economic Development grouping, which will consolidate ten agencies into one. In other cases, the consolidations should serve to move services closer to residents, such as the Healthcare grouping, which will consolidate access points to important services like Medicaid. In all cases, fiscal measures will be applied to improve the quality of the underlying services, especially in the case of PRDE. Across all agencies, the ultimate goal should be to drive efficiencies to improve services for the population while achieving the cost savings required to sustain a fiscal transformation.

Exhibit 40 shows total savings that must be achieved from personnel, non-personnel, compensation and utilities agency efficiency measures.

⁶⁹ Excludes transitory employees

⁷⁰ Excludes agencies which currently have \$0 operating budget and no employees

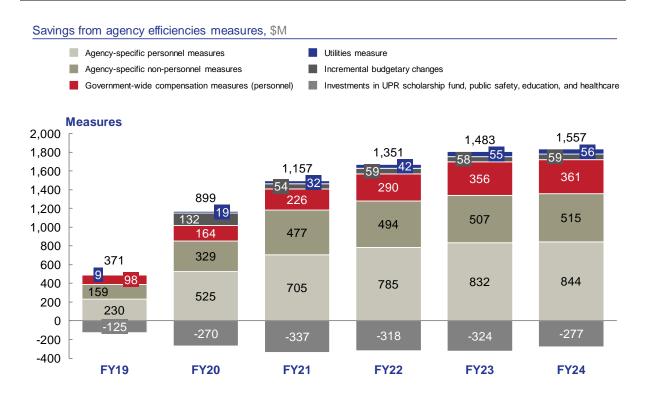
⁷¹ United States Census Bureau

⁷² Economic Development Bank for Puerto Rico 2018 Fact Sheet https://www.bde.pr.gov/BdeSite/PREDDOCS/PR-FactSheet-Oct2018.pdf

⁷³ Governing.com from U.S. Census Bureau, "States With Most Government Employees: Totals and Per Capita Rates"

⁷⁴ Represents grouping and independent agency plans as of May 2019

EXHIBIT 40: SUMMARY OF AGENCY EFFICIENCIES IMPACT



12.2 Agency-specific personnel and non-personnel efficiency measures

There are several actions that have been applied to each agency to achieve these targets:

- **First, some agencies will be closed completely** if their function and programs are not required, resulting in a 100% personnel and non-personnel savings for all non-federal funded expenditures after a 2 to 3-year wind-down period (a minimum of 50% savings must be achieved no later than year 2).
- Other agencies must be merged when benchmarking and best practices determine that activities across agencies could be better served through a single mission and management to eliminate redundancies, and/or where economies of scale make shared services more economical without reducing quality of service.
- **A small subset of agencies will be left independent but made more efficient** through a series of streamlining efforts related to both personnel and operations, allowing the agency to provide existing services at a lower cost to taxpayers.

The Government proposed six agencies for closure: Model Forest; Culebra Conservation and Development Authority;⁷⁵ Company for the Integral Development of Cantera's Peninsula;⁷⁶ Economic Development Bank; Industrial, Tourist, Education, Medical, and Environmental Control Facilities Financing Authority (AFICA); and National Guard Institutional Trust.⁷⁷

The target savings methodologies are organized below (Exhibit 41).

⁷⁵ Agency will only be partially closed, so funding will be reduced by 32% overall in FY20

⁷⁶ To be closed on July 1, 2033 per current law.

⁷⁷ The National Guard Institutional Trust, Economic Development Bank, and Martin Pena Canal ENLACE Project Corporation will close but not achieve any savings.

Savings targets, %	off of baselin	е	
	Closing	Merging	Efficiency
Back-office	100%	40-50%	15-20%
Front-line	100%	Variable	Variable
Non-personnel operations	100%	30%	20%

The Government has indicated that changes in proposed consolidations may occur in the future. Regardless of any changes, the Government shall still be accountable for achieving the total annual savings projected in the 2019 Fiscal Plan.

12.3 Cross-cutting non-personnel measures

Reducing utility costs: The Government should implement energy efficiency initiatives that reduce its utility payments in line with mainland energy efficiency efforts such as the U.S. Federal Energy Management Program (FEMP). Energy efficiency initiatives would include facility & fleet optimization (e.g., recycling), better procurement of energy, and strategic investments, potentially through utility capital expenditure. The Government must achieve savings of 15% on utilities expenses by FY2023, taking into account the rate increases projected by PREPA and PRASA. These savings should be \$19.2 million by FY2020 and reach \$55.7 million annually by FY2024.

Reducing costs in historically low visibility spend areas: The Government should also continuously monitor and reduce expenses in historically low-visibility areas (e.g., "unclassified professional services" and "englobadas"). Given data now available in the budget process, this 2019 Fiscal Plan imposes a 10% incremental cut on professional services and restricts unclassified professional services to 10% of all professional services.

12.4 Cross-cutting personnel measures

Maintaining a payroll freeze: The March 2017 Fiscal Plan included a measure to freeze all payroll expenditures which became law in FY2018. However, the freeze was due to expire at the end of FY2019. To extend the savings from freezing payroll increases, **the freeze must be continued** through the duration of the 2019 Fiscal Plan. This measure should amount to \$241.7 million in annual savings by FY2024.

Standardizing healthcare provided to government employees: Medical insurance is a core benefit provided to all government employees. However, the degree of coverage varies widely across government agencies, with some employees receiving superior coverage compared to their peers. For instance, Department of Education employees receive an average of \$120 per month in medical benefits, whereas employees of the Housing Finance Authority receive more than \$1,000 per month. ⁷⁸ To ensure fairness and reduce expenditures, the Government must implement its proposal to **standardize the health insurance received by each employee so that everyone receives \$125 worth of benefits per month, or \$1,500 per year**; additionally, employees of public corporations should maintain preexisting

⁷⁸Analysis of active, non-transitory government employees not supported by Federal Funds; data provided within January 2018 Government attrition model

conditions coverage. This initiative should have been fully implemented by the start of FY2019 and should lead to \$47.2 million in run-rate savings by FY2024.⁷⁹

Reducing additional outsized non-salary compensation paid to employees: There are several policies that the Government must continue to enforce through the duration of the 2019 Fiscal Plan that will impact personnel spend. These include:

- Asserting a hiring freeze with stringent requirements for backfilling positions left open by attrition or workforce reduction
- Limiting paid holidays to 15 days annually across all public employees
- Prohibiting carryover of sick and vacation days between fiscal years
- Prohibiting any future liquidation of sick and vacation days in excess of the amount of days permitted by law
- Eliminating the Christmas bonus for all public employees

The hiring freeze policy was included in the March 2017 Fiscal Plan, and the 2019 Fiscal Plan continues to enforce that policy while requiring the Government to propose stringent requirements for the backfilling of any opened positions and gain approval by the Oversight Board. The other policy measures outlined above were enacted in Act 26-2017, except for the elimination of the Christmas bonus. The elimination of the Christmas bonus is projected to lead to \$70.2 million in run-rate savings, starting in FY2019.

Total savings from compensation-related measures must achieve \$163.9 million in FY2020 and reach a run-rate of \$360.8 million per year beginning in FY2024.

To achieve the 2019 Fiscal Plan's savings projections, cross-cutting personnel (e.g., compensation-related) and non-personnel measures must be implemented according to the schedule described in **Exhibit 42**.

EXHIBIT 42: CROSS-CUTTING PERSONNEL AND NON-PERSONNEL MEASURE IMPLEMENTATION MILESTONES

Areas of focus	Action item	Deadline
	Pass legislation to freeze payroll for public employees through at least FY23	March 31, 2019
Payroll freeze	■ Institute payroll freeze	June 30, 2019
	Review policy of payroll freeze	June 30, 2023
Eliminate Christmas bonuses	Implement Christmas bonus phase out	December 1, 2018
	Launch RFP for uniform healthcare	July 1, 2018
	Implement new contract	January 1, 2019
Uniform healthcare	Launch new RFP process	January 1, 2022
	New provider coverage operational	July 1, 2022
	 Develop energy and water efficiency savings plan modeled after the U.S. Federal Energy Management Program 	July 1, 2018
Utilities savings	 Implement efficiency plan and achieve 40% of total run-rate savings in FY2020 	July 1, 2019
	Achieve 100% of run-rate savings, which will represent 15% savings off of FY2018 expenditures	January 1, 2023
Professional services and low	Conduct analysis of all professional services expenditures and those categorized as "other" to identify potential savings opportunities	July 1, 2019
visibility spending	■ Implement reduction of professional services and "low visibility" expenditures to achieve 10+%	July 1, 2019
reductions	 Categorize all professional services contracts moving forward to ensure reduction of "other" category 	October 1, 2019

⁷⁹This total excludes uniform healthcare savings from the Healthcare grouping which has been calculated independently and included in its respective section of the 2019 Fiscal Plan

Unfortunately, in FY2019, the Government paid the Christmas bonus and did not standardize healthcare benefits received by each employee. There also have not been any utility savings reported.

12.5 Department of Education (PRDE)

12.5.1 Current state and future vision for the Department of Education

Throughout the last decade, PRDE has encountered longstanding challenges which have contributed to low academic performance, including bureaucratic hurdles associated with operating as a single local education agency, inability to execute professional evaluations tied to quality outcomes in the classroom, and lack of a cohesive strategy for academic improvement.

In addition, PRDE, the largest agency in the central Government by spend, is outsized relative to need. While student enrollment has declined considerably over the past few decades (over 50% decline since its peak in 1980, and by about 33% in the past decade alone), ⁸⁰ the number of schools and teachers has not decreased proportionally (with only about a 30% reduction in public schools between 1990 and 2016). ⁸¹ With student enrollment expected to decline by roughly 70,000 by FY2024, PRDE has room to right-size its education system relative to the number of students. Tightening its system will give PRDE the flexibility and funding to focus on improving the quality of education provided.

To improve the capabilities and capacity of the Puerto Rican population, the Government will need to set high aspirations. PRDE aims to improve student academic achievement by **reducing the achievement gap by 12% annually on Puerto Rico proficiency tests,** achieving 80% proficiency in Spanish, 73% in Mathematics, and 77% in English; and further, improving the graduation rate to 90% by FY2023. This mandate is not easy but is attainable through a **series of education efficacy and efficiency measures as well as targeted investment in student and teacher outcomes.**

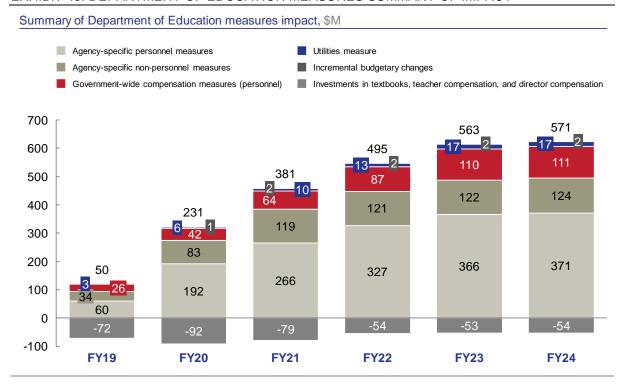
12.5.2 PRDE Efficiency measures

PRDE must achieve \$192.0 million in personnel savings, \$82.5 million in non-personnel savings, \$5.8 million in utility savings and \$42.2 million in compensation related savings in FY2020, exclusive of the 2019 Fiscal Plan investments of \$91.8 million. **Exhibit 43** shows the annual personnel and non-personnel savings that must be achieved through FY2024.

⁸⁰Helen F. Ladd and Francisco L. Rivera-Batiz, "Education and Economic Development in Puerto Rico" The Puerto Rican Economy: Restoring Growth, Brookings Institution Press, Washington, D.C., 2006, 189-238

⁸¹ There were 1,619 public schools in 1990 and 1,131 at the time of reporting. Oversight Board Listening Session, Secretary Julia Keleher, "On the Road to Transformation," November 30, 2017

EXHIBIT 43: DEPARTMENT OF EDUCATION MEASURES SUMMARY OF IMPACT



a) Non-personnel efficiencies

Consolidating the K-12 school footprint

After an analysis of several factors including capacity, geographic and cultural characteristics, distance to neighboring schools, transportation costs, and facility quality, among others, the October 2018 Certified Fiscal Plan determined that the Department of Education should close 307 schools by FY2020. Each school closure was estimated to save \$47,000 annually by reduction of facility costs. ⁸² To date, the Department has closed 255 schools, and the Oversight Board has determined that no further closures are required. ⁸³ Instead, savings from the closures that have not occurred (representing ~\$15-20 million per year) should be captured elsewhere. Consolidation of schools will also enable higher quality outcomes at lower cost by enabling systems to invest in a smaller number of higher-performing schools.

Procurement reform

Independent of, but accelerated through, consolidations, PRDE procured spend should be reduced by approximately 10-15% through centralized procurement policies including strategic purchasing and demand controls (see full set of procurement levers in *Section 12.2*).

b) Personnel efficiencies

Personnel optimization from school consolidation

^{82 ~\$47,000} is a result of analyzing Government-provided school closure data from previous years and represents the average non-personnel savings across a group of 151 closed schools

⁸³ A previous version of the 2019 Fiscal Plan was uploaded that attributed a requirement for 307 school closures to the 2019 Fiscal Plan, which should have been attributed to the October 2018 Certified Fiscal Plan. This revised version clarifies that the 2019 Fiscal Plan requires no additional school closures beyond the 255 already closed.

To date, school consolidations have not always led to proportional cost savings because they are often not accompanied with concurrent reductions in staff. Going forward, per the 2019 Fiscal Plan, the number of school staff should decline proportionally to the projected decrease in number of schools. For example, the number of school administration (principals, office staff, etc.), food service staff, facility maintenance staff, and other school-specific staff should be scaled down accounting for a smaller number of schools. To do this, the Department should endeavor to maintain its 2018 average of 2.24 administrative FTEs per school, 3.39 food services FTEs per school, and 2.27 maintenance FTEs per school.

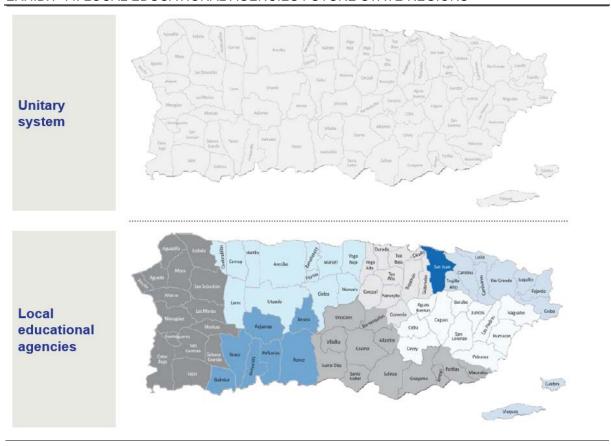
Improving student-teacher ratio

The ratio of general education students to academic teachers in Puerto Rico was of 11:1 as of Fiscal Year 2018, lower than that of districts such as Miami-Dade County Public School (16:1). Puerto Rico's student-teacher ratio will only continue to decrease with the projected student enrollment declines in the coming years without proactive changes. To address this, academic teacher staffing levels will be reduced to reach a target student-teacher ratio of 14:1. The target ratio is below the benchmark because an allowance must be made for the differences between Miami-Dade and Puerto Rico. The latter is spread over a much larger geographical area and comprises both urban and rural areas.

Right-sizing regional and center level structure

Rather than function as a single Centralized Education Agency (CEA), PRDE should create regional Local Education Agencies (LEA), with the objective of reducing administrative headcount while providing locally relevant services to schools (**Exhibit 44**). The Department has already begun this effort.

EXHIBIT 44: LOCAL EDUCATIONAL AGENCIES FUTURE STATE REGIONS



This new regional LEA model will be leaner while also decentralizing the administration of individual schools, putting decisions closer to students and families and improving outcomes. Developing and relying on local leadership must also allow PRDE's central administrative structure to right-size to staffing levels comparable to state educational agencies (SEAs) in comparable mainland U.S. states. Currently, the central administration is projected to have one staff per 133 students by FY2022; the median of U.S. states is a ratio of 1:166. A decentralized model also decreases dependency on the secretary's office for day-to-day decision making, building capabilities of second-line management at the regional level.⁸⁴

Implementing the regional LEA model must involve allocating administrators more effectively for decision-making. The model should decrease headcount requirements at the regional level and central level; further, allocation of administrators in less costly regional centers (as opposed to centrally) should enable cost savings on retained positions. Each regional office is expected to have capable leadership and staff to execute core functions, including operations, student services, accountability, and academic standards.

⁸⁴Oversight Board Listening Session, Secretary Julia Keleher, "On the Road to Transformation" November 30, 2017

Investments in the children of Puerto Rico

The education of the children of Puerto Rico, and their successful entrance into the workforce, is a core goal of PRDE. Investment in education has also been shown to drive long-term economic growth – and in the case of Puerto Rico is projected to add 0.17% increase in GNP growth by FY2049 and keep growing thereafter. As a result, it is important that investments be made in three major areas:

- 1. Teacher development and retention
- 2. Director salary increases
- 3. New educational materials such as textbooks

Teacher development and retention

Teachers are considered one of the most determinative factors in student success in the classroom and standard of living beyond the classroom. For example, a 2011 National Bureau of Economic Research study found that U.S. classes with an average-quality teacher had a lifetime income of \$266,000 higher than classes with a poor-quality teacher in each year. Improved education through enhanced teacher quality is critical to the long-term success of the children of Puerto Rico and will help to lift a new generation of Puerto Rican residents out of poverty. Recognizing this, PRDE has committed to transforming system practices related to attracting, retaining, and developing teachers and administrators:

- 1. Providing increased opportunities for and higher quality of training for teachers (e.g., in-class; through leadership academies; STEM development through collaboration with universities)
- **2.** Creating opportunities for targeted skill development (e.g., instituting mentorship programs to enable coaching by experienced and high-performing teachers as a cost-neutral, and often high impact, initiative)
- **3. Investing in teacher salaries to improve competitiveness.** As of FY2018, teachers in Puerto Rico had not received a pay raise in nearly a decade, causing Puerto Rico to lose out on opportunities to attract and retain talent. The Oversight Board supported a \$1,500 annual salary increase for all academic teachers in FY2019, and proposes an additional \$500 raise for all teachers, academic and non-academic, in FY2020

Investments in the children of Puerto Rico (continued)

Director salary increases

School directors are critical to achieving the goals of the 2019 Fiscal Plan. They can drive the dual push for increasing quality of instruction while making more efficient use of resources. They also ensure a successful transition for the students and staff who move schools following a closure. Finally, as administration moves to a leaner model based on regional LEAs, directors will be relied on to work closely with students and staff to drive educational change. The October 2018 Fiscal Plan provided for a \$5,000 raise for directors for FY2019. In FY2020, the 2019 Fiscal Plan proposes a further raise of \$500 per year for all directors.

New educational materials including new textbooks

Teachers are currently limited in their ability to provide the best educational opportunities because of the limited resources available, including up-to-date textbooks. Therefore, ~\$70 per student (for FY2019-FY2021) has been invested in procuring new textbooks, or \$21-24 million each year as one-time costs.

12.5.3 Implementation of reforms

To achieve the 2019 Fiscal Plan's savings projections, reforms within the Department of Education must be implemented according to the schedule described in **Exhibit 45**.

To date, the Department has completed the closure of 255 schools, and the Oversight Board has determined that it will not be required to close more. These closures have resulted in lower utilities and other operating costs, but as many of these buildings have been left empty or repurposed for administrative uses, full savings per school closure have not been captured. Based on data provided by the Department in April 2019, it was on track to meet its student-teacher target ratio of 11.8 academic teachers to general education students for FY2019. There are, however, no plans to reduce the need of administrative headcount due to decentralization. Finally, there has been no implementation of procurement initiatives, as the Department is relying on the central OCFO procurement transformation.

EXHIBIT 45: DEPARTMENT OF EDUCATION GROUPING KEY IMPLEMENTATION MILESTONES

Areas of focus	Action item	Deadline
	 Outline clear pathway to achieving 33% progress to desired student-teacher ratio by end of FY19 (school closures and any other measures) 	August 1, 2018
Optimize student- teacher ratio	Publish number of teachers reduced through school closures	September 1, 2018
teacher ratio	Outline further measures required to reduce teacher numbers	September 10, 201
	Complete measures to achieve target of 14:1	End of SY22
	Close 255 total schools	End of SY18
	Develop transportation plan for relocated students	July 1, 2018
Enact school consolidations and closures	Ensure cancellation of auxiliary service contracts (i.e. food, maintenance) to capture savings and release non-teacher headcount reductions	August 1, 2018
and closures	Sell or reappropriate empty buildings	September 1, 2018
	Publish report on cost savings achieved through school closures (non-teacher personnel and auxiliary services)	November 1, 2018
	Established regional superintendencies	August 1, 2018
	Pass legislation to formalize new structure	October 1, 2018
Decentralize	Merit-based Regional Leadership selection system in place	October 1, 2018
institutions and	Regional superintendancies established and staffed	October 30, 2018
structure	Publish plans for rightsizing the state educational agency (SEA)	October 30, 2018
	■ Implement rightsizing plans	December 31, 201
	Review rightsizing plans	Ongoing
	Develop new centralized operating model for procurement	September 1, 2018
Achieve	■ Identify major contract targets for savings	September 1, 2018
procurement	Release RFP for major services	October 1, 2018
efficiency	Capture savings	November 1, 2018
	Review procurement strategy	January 1, 2021

12.6 Department of Health (DOH)

12.6.1 Current state and future vision for the Department of Health

Currently, the Government has several health-related agencies that are highly fragmented: three public corporations, three public hospitals, seven sub-secretaries, six regional offices, and eight program offices administering 64 federally funded programs—all with their own support functions. Such fragmentation drives up cost and inefficiency, as each agency provides its own human capital management, procurement, and financial support. Citizen experience and care delivery also suffer as Puerto Ricans face multiple handovers of individual cases across frontline staff with fragmented focus.

In the future state, the Department of Health will involve consolidation of six of the healthcare agencies with centralized support functions: The Department of Health (DOH); Medical Services Administration (ASEM); Health Insurance Administration (ASES); Mental Health and Addiction Services Administration; Puerto Rico and the Caribbean Cardiovascular Center Corporation; and Center for Research, Education, and Medical Services for Diabetes (**Exhibit 46**). 85 This new DOH should enable efficiencies while maintaining high quality public health. Consolidating these six agencies should provide opportunity for right-sizing support functions, as well as centralizing procurement to provide savings on costly medical materials and equipment.

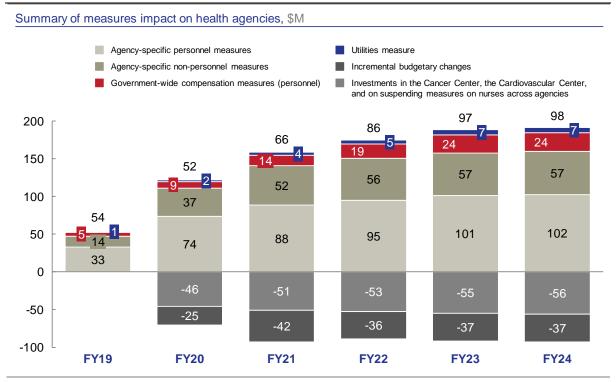
⁸⁵ University of Puerto Rico Comprehensive Cancer Center will likely remain separate but is maintained in the Health Grouping given no formal legislation passed as of May 2019

1 Department of Health	5 Center for Research, Education and Medical Services for Diabetes
Health Insurance Administration (ASES)	Mental Health and Addiction Services Administration
3 Medical Services Administration (ASEM)	7 University of Puerto Rico Comprehensive Cancer Center ¹
4 Puerto Rico and the Caribbean Cardiovascular Center Corporation	
1 Current consolidation plan may leave this agency as a separate entity	

12.6.2 Efficiency measures for the Department of Health

By bringing together six agencies to create the Department of Health (DOH), the Government must take advantage of personnel and non-personnel savings that can be achieved through consolidation. DOH must achieve \$73.9 million in personnel savings, \$36.9 million in non-personnel savings, \$8.9 million in compensation measures, and \$2.3 million in utility savings by FY2020. **Exhibit 47** includes annual savings for the Health grouping that must be achieved through FY2024, as well as the Cancer Center.

EXHIBIT 47: DEPARTMENT OF HEALTH MEASURES SUMMARY OF IMPACT



a) Personnel efficiencies

Consolidation of administrative and support functions

Efficiencies can be found following the agency consolidation in administrative and support areas, including Direction, General Administration, Auxiliary Services, IT, and a portion of hospital administration. 35% savings in these areas are expected by the Fiscal Plan by 2021 when compared to their FY2018 baseline. For FY2020, the Fiscal Plan expects two thirds of these savings to materialize, with the remainder achieved next year.

Efficiency and right-sizing of non-administrative health payroll

As population declines, spend on non-administrative payroll, such as that on allied health professionals, is expected to decline. The 2019 Fiscal Plan also expect the departments to find efficiencies after merging. The projection of these savings was developed jointly between the

Oversight Board, the Government, and health agencies. Note that the rightsizing measures have been updated to exempt funding for nurses from measures, as detailed in the following section.

As of FY2018, Medicaid had 85 offices across 78 municipalities that can be consolidated into fewer, more strategic locations. Reducing the Medicaid office and regional hospital office structure will eliminate duplication of effort and redundancies—and allow the Department to provide more robust services at convenient locations. In addition, ASES will redesign the Medicaid eligibility and enrollment process (more web-based, MCO-dependent, hospital responsibility, etc.) and encourage online services to improve data management. Best practices from the mainland include engagement of third-parties within hospitals to identify and enroll eligible patients into the Medicaid program.

b) Non-personnel efficiencies

Supply chain management

Due to the large volume of spending on procuring medical supplies and equipment, and the high cost of such materials, there is a significant opportunity to improve procurement efficiency through best practice supply and demand management, and better employing economies of scale.

Hospital management transformation

In addition to other agencies' non-payroll savings, hospital transformations will likewise seek to improve procurement savings specifically for hospitals and health systems, by focusing on commodity standardization and sourcing, indirect spending (analyzing insourcing vs. outsourcing opportunities), and physician preference item optimization.

Holistic hospital transformation efforts should also reduce payroll spend through clinical labor optimization, which is captured in the personnel measures. For example, wages should be optimized to fair market value to reduce turnover and therefore temporary/overtime spend; and role/responsibilities should be optimized to skill level and wage rate.

Restructuring ASEM and Revenue Cycle Management

ASEM is a public corporation originally created to serve as a central procurement office for government hospitals to create economies of scale for medical supplies, devices, and services. Throughout the years, rates, salaries, and services have increased at a higher rate than within the broader industry, and procurement processes have decentralized across the hospitals ASEM was created to serve.

The focus areas of this measure include: establishing a centralized Medical Center including ASEM, University, Pediatric and Cardiovascular hospitals; identifying and establishing key hospitals across the Island; designing and implementing a referral system among key hospitals and clinics; and establishing a physician network. Improvements will be made to personnel, process, and technology.

Investments in better health outcomes on Island

Maintaining nurse staffing levels

The agencies in the Health grouping have drawn attention due to the difficulties of providing an appropriate level of care in their facilities given pressures in nurse staffing. As such, the 2019 Fiscal Plan includes \$15+ million in funding beginning in FY2020 to maintain current nurse staffing levels by reversing all potential reductions of nurses. This investment amounts to \$104 million over FY2020 to FY2024.

Cardiovascular Center and Comprehensive Cancer Center

The 2019 Fiscal Plan provides the Cardiovascular Center for Puerto Rico and the Caribbean with \$2 million for the purchase of medical products and materials, to be covered with funds collected from higher Special Revenue Funds than expected. The Oversight Board believes this to be evidence of increased provision of its services and accepts the request. The Comprehensive Cancer Center is a new facility which promises high quality integrated treatment for patients. An additional \$25+ million in Special Revenue Funds is included to allow them to move to full operationalization.

Mental Health and Addiction Services Administration (ASSMCA)

The 2019 Fiscal Plan invests \$12 million over FY2020 and FY2021 (\$6 million each year) to enable the General Psychiatric Hospital to receive Medicare certification. The hospital is currently not certified for Medicare because it does not comply with minimum staffing and care levels. Additional funds should thus be used to increase care standards by making physical repairs to the hospital and improving staffing levels.

Capital expenditures

The 2019 Fiscal Plan also provides \$4 million in capital expenditures funding for the healthcare agency grouping to cover medical and office equipment, as well as generator purchases and emergency room improvements.

12.6.3 Implementation of reforms

To achieve the 2019 Fiscal Plan's savings projections, reforms within the Department of Health grouping must be implemented according to the schedule described in **Exhibit 48**.

To date, the Government is in the process of presenting a consolidation plan to the Legislature for agencies in the Health grouping, which does not include the Cancer Center. The agencies in the grouping have achieved some back-office payroll consolidation and savings from reducing duplicative positions. These payroll reductions were achieved through use of the Voluntary Transition Program and did not achieve the rate required by the 2019 Fiscal Plan and reflected in certified budgets.

reas of focus	Action item	Deadline
	 Pass legislation of merging entities 	January 1, 2019
Consolidate agencies	Complete system integration between agencies	June 30, 2019
agenoies	Monitor merger progress	Ongoing
	Complete capacity analysis	September 1, 2018
	Create new organizational plans	November 1, 2018
Rightsizing	Create training program for employee transitions	January 1, 2018
personnel	Commence wave two of rightsizing	July 1, 2019
	Assess rightsizing achievements and review strategy for date	July 1, 2021
	Complete rightsizing	June 30, 2023
	Identify branch inefficiencies and determine offices for closure, leaving centralized locations	November 1, 2018
Consolidate regional	Create plan for office closures	December 1, 2018
Medicaid offices	■ Implement closures	February 1, 2019
	Monitor post-closure savings	Ongoing
	Conduct thorough inventory of current procurement processes, suppliers, and process owners	October 1, 2018
	Begin RFP process for vendors	November 1, 2018
	Select vendor	December 1, 2018
mprove supply hain management	• Implement changes	February 1, 2019
main management	Review current provider and issue new RFP	January 1, 2021
	Launch new provider contract	July 1, 2021
	Monitor savings	Ongoing
	 Identify opportunities for process standardization (procurement, outsourcing of tasks, technology integration) 	October 1, 2018
	Build plan including creating workflows and standard policies based on best practices by practice area	December 1, 2018
ransform hospital	Redesign evaluation criteria based on best practices and outcomes	December 1, 2018
nanagement	Review current operations and build new map strategy	January 1, 2022
	■ Implement new system	June 30, 2022
	Monitor savings	Ongoing
	Launch RFP for external support	August 1, 2018
	Sign contract with provider	September 1, 2018
Redesign ASEM / evenue cycle	■ Implement revenue cycle management	October 1, 2018
evenue cycle nanagement	Review current provider performance and requirement	January 1, 2021
	Launch new provider	June 30, 2021
	 Monitor savings and maintain provider relationship 	Ongoing

12.7 Department of Public Safety (DPS)

12.7.1 Current state and future vision for DPS

The Department of Public Safety (DPS) is an agency grouping which was approved by Puerto Rico's Legislature in 2017 (Act 20) and includes eight agencies responsible for **ensuring the safety and security for all residents of the Island** (**Exhibit 49**). The grouping includes the following agencies:

EXHIBIT 49: LIST OF AGENCIES IN DEPARTMENT OF PUBLIC SAFETY GROUPING

1 Puerto Rico Police Department (PRPD)	5 9-1-1 Services Governing Board
2 Firefighters Corps	6 Institute of Forensic Sciences
3 Emergency Medical Services Corps	7 Special Investigation Unit
Emergency Management and Disaster Administration Agency	8 Department of Public Safety

The largest agency by spend and personnel is the Puerto Rico Police Bureau (PRPB, representing ~85% of total DPS spend). As a result, most of the measures and investments identified within the grouping apply to the Bureau. Based on recent reports, over 2,000 of the 13,000 sworn officers in the Police as of FY2018 are still fulfilling administrative roles. This situation, accompanied by the heavy attrition of sworn officers, led to a 2013 consent decree agreement with the U.S. Department of Justice on reform measures, which compelled the PRPB to conduct a staffing allocation and resources study to assess the proper size of the police force. Based on these findings, PRPB needs to rebalance the workforce and move sworn officers to non-administrative roles to improve personnel resource allocation and maximize public safety. As such, the 2019 Fiscal Plan reforms are crafted with that overall goal in mind, and therefore includes measures to transition sworn officers to the field, add civilians to

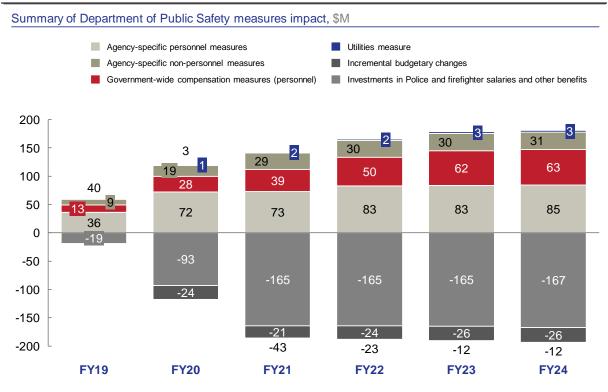
backfill administrative roles, and increase police salaries to bring to competitive levels as compared to the mainland by FY2021.

For other DPS bureaus, the 2019 Fiscal Plan aims to drive savings through consolidation of back office functions, while allocating funds for priorities such as: materials and equipment, additional frontline personnel for the Institute of Forensic Sciences, and investments for equipment and salary increases for the Firefighters Corps.

12.7.2 Efficiency measures for DPS

DPS must achieve \$72.4 million in personnel savings, \$19.1 million in non-personnel savings, \$1 million in utility savings and \$27.6 million in compensation reductions in FY2020. Additionally, investments of \$93.3 million will be made across DPS agencies in FY2020. Refer to **Exhibit 50** for annual savings as well as investments, which must be achieved through FY2024.

EXHIBIT 50: DEPARTMENT OF PUBLIC SAFETY MEASURES SUMMARY OF IMPACT



a) PRPB personnel efficiencies

In order to enable more than 1,000 sworn officers to move to the field by FY2024 and to drive efficiency across personnel operations, there are a number of initiatives PRPB should pursue.

Process improvements

PRPB should **reduce administrative tasks and activities** by leveraging modernization, including digitization of incident reporting, automation of time and attendance systems, and consolidation of statistical reporting. Furthermore, DPS will streamline vehicle maintenance processes through superior scheduling and procurement protocols, which can reduce the need for vehicle maintenance staff.

Station, unit, and division consolidation and eliminations

PRPB should **consolidate police stations, transit units, and specialized units** to reduce the amount of administrative personnel required (e.g., station desk officers, station commanders and directors, stations auxiliary commanders and directors, and vehicle managers). Simultaneously, PRPB should **eliminate units and divisions** which perform duplicative services already provided by other agencies within the Government (e.g., the Divers Unit, the Rescue Squad Division, and Mounted Divisions).

Civilianization of non-core tasks

PRPB should replace sworn officers currently performing civilian duties—such as mechanics, radio operators, record and report keepers, area command statistics compilers, and maintenance workers—with **less expensive civilian personnel**. In an FY2018 study on PRPB's workload and resource allocation, it was estimated that more than 2,000 sworn officers were performing administrative functions—not providing safety and protection to people in the streets and communities of Puerto Rico. These updated reforms will move more than 1,000 sworn officers to non-administrative roles between FY2019 and FY2024 and provide resources to hire an additional ~900 civilian personnel to perform the administrative functions. The replacement rate is not 1:1 due to aforementioned process improvements that will allow for workload efficiencies of administrative tasks.

Overtime efficiencies

PRPB spent approximately \sim \$50 million on overtime in FY2018 (excluding the emergency overtime needs resulting from Hurricane Maria). This level of overtime is considerably higher than overtime for comparable police forces in U.S. mainland states. For instance, Connecticut, which has a similar population to Puerto Rico, had overtime spend of only \sim \$28 million on a comparable basis in 2017. This gap comes even though Connecticut's total police spend per capita is \sim \$140 less than in Puerto Rico⁸⁶.

Through the levers identified in the above measures, in addition to general efficiencies in scheduling and overtime management, PRPB can **reduce paid overtime by 60%**.

b) Other DPS agency personnel efficiencies

All other DPS agencies will achieve savings equal to the rate of expected attrition of $\sim 3\%$ annually and a 50% reduction in transitory workers starting in FY2019; however, the Firefighter Corps is excluded from transitory savings due to the goal of maintaining front-line personnel levels to maximize public safety.

c) All DPS agency non-personnel efficiencies

All DPS agencies will achieve efficiency savings of 30% of total procurement spending by FY2021. This will be done by consolidating purchasing for all DPS agencies to achieve procurement efficiencies.

⁸⁶ Connecticut Office of the State Comptroller; census data 2014; FBI Crime Justice Information Services

Investments in public safety on the Island

Investments in Police compensation and equipment

Due to high attrition rates of sworn officers in Puerto Rico (potentially 6-8% in FY2019), the 2019 Fiscal Plan invests resources to improve the competitiveness of salaries over two years. This will represent a per officer salary (and required benefits) increase of ~\$11,500 relative to FY2019 levels, which already included a \$1,500 raise per sworn officer instituted at the beginning of FY2019. There is also funding provided to increase life and disability insurance to \$250 per year per sworn officer starting in FY2020, to meet needs voiced by sworn officers. Finally, Social Security contributions for all police will begin in FY2020, and the 2019 Fiscal Plan will continue to cover payments to sworn officers for past services of \$122 million in FY2019, FY2020, and FY2021.

In addition to salary increases, ~200 cadets will need to be hired each year to offset some of the 3% expected attrition and achieve the steady state target of ~11,700 sworn officers in the field by FY2023.

The 2019 Fiscal Plan also includes \$42 million in funding for capital expenditures to purchase bullet proof vests, radios, and vehicles.

Investment in Firefighter salaries and equipment

Due to the importance of public safety in Puerto Rico, the Oversight Board will also provide the additional funding required to increase firefighter salaries by \$500 annually. Additionally, \$2.9 million will be provided to the Firefighter Corps to allow for the purchase of equipment and materials, and \$14 million in capital expenditures will be provided to pay for fire pumps, vans and trucks.

Personnel and materials for Institute of Forensics

The 2019 Fiscal Plan provides funding of \$4.6 million per year in to allow the Institute of Forensics to add an additional ~90 positions needed to reduce a backlog of cases and operate at a sustainable level in the future. Additionally, more than \$760 thousand will be provided for the purchase of laboratory chemicals and other materials.

12.7.3 Implementation of reforms

To achieve the 2019 Fiscal Plan's savings projections, reforms within the Department of Public Safety grouping must be implemented according to the schedule described in **Exhibit 51**. To date, PRPB has instituted the 2019 budgeted salary increase, projects to achieve overtime savings targets for FY2019, and achieved some savings from sworn officer reductions through attrition and has delivered small progress on unit elimination. However, this has been accompanied by mass attrition, encouraged through the Voluntary Transition Program, in sworn officers. As such, the 2019 Fiscal Plan highlights the need to drive true process and back office efficiencies, as relying on retirement incentive programs to reduce frontline officers has the potential to negatively impact service levels. Other DPS agencies have achieved some savings through normal personnel attrition and transitory worker reductions, but have not started any consolidation efforts, which are crucial to FY2020 savings.

Areas of focus	Action item	Deadline
Improve	Publish plans for improving processes (including automation etc.)	September 1, 2018
	Implement plans for improving processes	December 1, 2018
processes	Evaluate process improvement strategy	June 30, 2020
	Identify and implement additional process improvement opportunities	Ongoing
Civilianization of	Publish plan of sworn officer positions that can be replaced with civilian-like duties for staff reduction/replacement with civilian counterparts	September 1, 2018
non-core tasks	Evaluate civilianization and outsourcing strategy	June 30, 2020
Consolidation/	Publish plan to consolidate stations, units and divisions	August 31, 2018
elimination of stations, units	■ Implement plan	March 1, 2019
and divisions	Identify additional consolidation and elimination opportunities	Ongoing
	Publish plan to reduce overtime	August 31, 2018
Overtime efficiencies	■ Implement plan	December 31, 201
	Review and evaluate overtime reduction plan	January 1, 2020
	Identify officers eligible for a raise of \$1,500 of annual salary	by FY 2019
	■ Institute \$1,500 raise across all sworn officer positions within PRPD	by FY 2019
Salary and benefits increases	 Institute additional raise for all sworn officer to close PPP-adjusted U.S. mainland salary gap of ~\$11,000 and provide additional \$100 per year per officer for improved life and disability insurance 	by FY 2021
	 Institute \$500 raise for all firefighters in the Puerto Rico Firefighter Corps 	By FY2020
	Monitor retention rates and evaluate need for further raise	Ongoing
	Identify addressable non-personnel spend	September 1, 2018
Non-personnel	Reduce non-personnel spend by 1/3 of the total run-rate savings	by FY 2019
spend reduction	Review procurement spend reduction strategy	January 1, 2021
	Reassess opportunities for procurement efficiencies	January 1, 2023

12.8 Department of Corrections and Rehabilitation (DCR)

12.8.1 Current state and future vision for DCR

DCR manages the functions and policies of the Puerto Rican correctional system, including penal institutions and rehabilitation facilities, for men, women, and juveniles. The Correctional Health Department provides healthcare to the inmates under the jurisdiction of DCR. Their combined FY2018 budgets were \$419 million, and they had a total of 7,809 employees and 10,339 prisoners as of June 2018, leading to total spend of more than\$40,000 per prisoner before measures. Both agencies are part of the DCR grouping (**Exhibit 52**).

EXHIBIT 52: LIST OF AGENCIES IN FUTURE STATE DEPARTMENT OF CORRECTIONS AND REHABILITATION GROUPING



DCR's combined number of employees is much higher than the relative number of employees in peer prison systems within mainland U.S. states. While the reality of an aging prison system dependent on outdated technology necessitates a relatively higher number of employees, the actual number of employees is substantially higher than comparable benchmarks; whereas DCR's FY2018 FTE-to-inmate ratio was 0.76, the 50th percentile of U.S. states has only 0.41 FTEs per inmate. ⁸⁷ Additionally, Puerto Rico's prisons are underutilized—while most U.S. state prison systems are near 100% utilization, ⁸⁸ Puerto Rican prison facilities

⁸⁷NASBO, FBI, BJS databases

⁸⁸Census data, 2014; Bureau of Justice Statistics, 2014

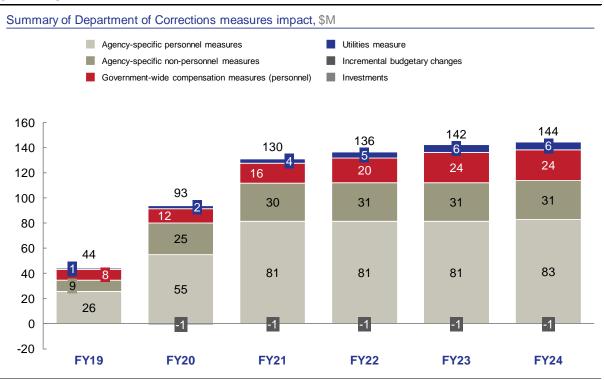
were only 78% utilized as of FY2018 due to declines in the prison population over the past decade that have not translated into reductions in government resources dedicated to prisons.

DCR must rightsize **Puerto Rico's correctional facilities and FTE footprint** to reflect changes in the prison population and by improving procurement effectiveness across all categories.

12.8.2 Efficiency measures for DCR

DCR must achieve \$55.0 million in personnel savings, \$25.1 million in non-personnel savings, \$11.5 million in compensation reductions, and \$2.2 million in utility savings in FY2020. Refer to **Exhibit 53** for annual savings that must be achieved through FY2024.

EXHIBIT 53: DEPARTMENT OF CORRECTIONS AND REHABILITATION MEASURES SUMMARY OF IMPACT



a) Personnel efficiencies through improved FTE-to-inmate ratio

To bring the system in line with the requirements of the population and to increase utilization across all prisons, **DCR should close approximately 9 prisons to reach an overall system utilization of 93%,** while still maintaining appropriate separation of different inmate risk profiles and populations, including men, women, and juveniles.

Personnel savings could be captured by reducing DCR FTEs per inmate to reach an adjusted U.S. median benchmark of 0.54 FTEs per inmate through attrition and active workforce reductions. ⁸⁹

Five prisons were slated for closure in FY2018,90 and their prisoners have already been relocated to other prisons. Two additional prisons are expected to be closed by the end of

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⁸⁹Census data, 2014; Bureau of Justice Statistics, 2014

⁹⁰These are identified as prisons with prison populations of 0, based on latest data from DCR and Rehabilitation; they include: Esc. Ind. Mujeres Vega Alta, Hogar Adaptación Soc. Vega Alta, Inst. Correccional Zarzal, Modular Detention Unit, and Vivienda Alterna Anexo 246 Ponce

FY2019, and two more in FY2020. Implementation costs that are accounted for in savings calculations include transporting prisoners to other facilities, frictional costs of redundant personnel across prisons and inmates, among other initiatives.

To further enable savings from consolidations and reduced FTEs, DCR may contemplate initiatives to actively reduce prison population as appropriate, such as alternative custody, diversion and/or credits for good behavior/program completion, programs to reduce recidivism like in-prison drug rehabilitation, and increased training and occupational programs.

b) Non-personnel efficiencies

Facility consolidations

Facility consolidations will also allow **non-personnel savings through reduced operational costs. Forty percent of non-personnel operating expenditures could be captured for each closed facility** by consolidating the physical footprint, winding down contracts, and other levers, with the remaining operating expenditures transferred to support population increases in other facilities. These savings account for the inability to reduce certain fixed costs associated with the facilities.

Non-personnel optimization

In FY2018, DCR spent \$73 million on **procurement,** costs that can be reduced through a variety of means, including leveraging the Federal General Services Administration, utilizing e-auctions, launching competitive Requests for Proposal (RFPs), centralizing purchasing to the greatest extent possible, and outsourcing/contracting responsibilities. Using benchmark savings percentages for major spend areas would result in ~\$9 million potential savings opportunity, excluding correctional healthcare.

For **correctional healthcare**, the Government spent more than\$6,000 per inmate based on the terms of its recent HMO contract. By comparison, the 50th percentile of U.S. states spend \$3,800 per inmate. ⁹¹ Bringing this per-inmate spend in line with the 50th percentile of U.S. states would generate annual savings of \$25.8 million by FY2024. ⁹² The Government can unlock these savings by renegotiating existing contracts, launching competitive RFPs for other correctional healthcare providers that will provide terms more in-line with mainland spending practices, reconsidering level of service due to the currently declining prison population, and strategically evaluating insourcing options.

12.8.3 Implementation of reforms

To achieve the 2019 Fiscal Plan's savings projections, reforms within the Department of Corrections and Rehabilitation grouping must be implemented according to the schedule described in **Exhibit 54**.

DCR reforms have been slowed by the delay in developing and submitting a viable plan to achieve savings through prison consolidation and/or externalization. Finally, there have been no proposed redesigns within the Correctional Health Department.

⁹¹Source: Pew data 2011, normalized for GDP PPP and inflated to 2017 dollars based on CPI data (2011-2017 compounded inflation rate of 10%)

⁹²Pew data, 2011

EXHIBIT 54: DEPARTMENT OF CORRECTIONS AND REHABILITATION GROUPING KEY IMPLEMENTATION MILESTONES

Areas of focus	Action item	Deadline
	Publish plans to consolidate prisons	August 1, 2018
	Close 5 prisons	September 1, 2018
Consolidate	Implement plan to reuse or sale buildings	October 1, 2018
facilities	Close further 2 prisons	February 1, 2018
	 Implement plan to reuse or sell additional buildings 	March 1, 2018
	Evaluate opportunities for additional closures	Ongoing
	Publish plans to reduce headcount across DCR system	August 1, 2018
Rightsizing	Commence stage one of rightsizing	September 1, 2018
personnel	Implement further agency efficiency measures	July 1, 2019
	Complete agency efficiency measures	June 30, 2021
Optimize	Publish plans for consolidation of procurement spend	September 1, 2018
	 Initiate RFPs as needed for vendors to improve quality and cost of services 	September 15, 2018
procurement	Select vendors and sign contract to address min. 20% of procurement costs	October 1, 2018
spend	Review procurement strategy	January 1, 2021
	Reassess opportunities for procurement efficiencies	January 1, 2023
Redesign correctional	Launch RFP for correctional health services	October 1, 2018
	Appoint vendor for services	December 1, 2018
health program	Implement new contract	January 1, 2019
	Confirm strategy for any additional savings needed beyond those in contract	July 1, 2020

12.9 Hacienda / Office of the CFO (OCFO)

12.9.1 Current state and future vision for Hacienda / Office of the CFO

At the beginning of FY2018, the financial management functions—as well as basic administrative functions—of the Government are spread across several entities; for instance, the Office of Management and Budget is responsible for administering the Annual Budget of Puerto Rico, the General Services Administration is responsible for procurement processes, and ownership of other fiscal and payroll responsibilities are distributed across another four agencies. This distribution has led to historical problems for the Government, as the number of bank accounts, special revenue funds, and other untracked funding and expenditure streams have proliferated. Indeed, the lack of one office that has authority over all revenues and expenditures—and is also accountable for balancing the budget—has been a **major barrier for the Commonwealth's ability to regain its fiscal sustainability and publish accurate and timely financial reporting**.

As discussed above, consistent with the Government's proposal, the Commonwealth shall **consolidate all financial management, HR and procurement activities under the OCFO**. The OCFO will have authority and accountability over the following agencies, which could be consolidated or eliminated (**Exhibit 55**):

EXHIBIT 55: LIST OF AGENCIES IN FUTURE STATE HACIENDA / OCFO GROUPING

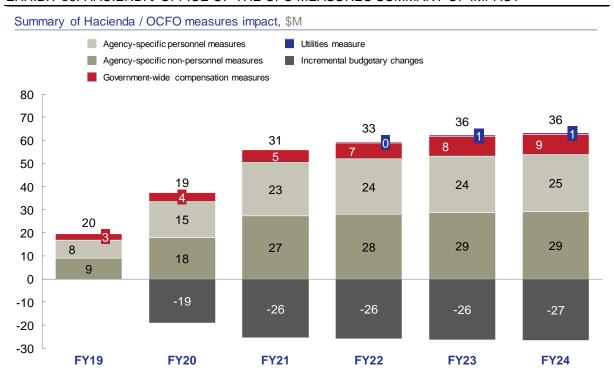
1 Department of Treasury (Hacienda)	4 Treasury (internal entity)
2 Office of Management and Budget	General Services Administration
3 Office of Administration and Transformation of HR	6 Fiscal Agency and Financial Advisory Authority1
Current consolidation plan may leave agency as a separate entity	

Expected roles and responsibilities of the new OCFO / Hacienda are detailed above. Below represents the expected savings resulting from the consolidation of the agencies included in this new organization.

12.9.2 Efficiency measures for Hacienda / Office of the CFO

Hacienda / OCFO must achieve \$15.5 million in personnel savings, \$18.0 million in non-personnel savings, \$3.8 million in compensation measures and \$0.2 million in utility savings by FY2020. Refer to **Exhibit 56** for annual savings that must be achieved through FY2024.

EXHIBIT 56: HACIENDA/ OFFICE OF THE CFO MEASURES SUMMARY OF IMPACT⁹³



a) Hacienda personnel and non-personnel efficiencies

Hacienda must attain an overall **15% net reduction in costs (approximately \$33 million), which is 25% gross (approximately \$55 million)** in line with the level of cuts seen in other Treasury Department transformations. For instance, a transformation within Her Majesty's Revenue and Customs agency in the UK successfully cut costs by 25% over a five-year period through a series of management initiatives, including reducing IT costs, increasing operational efficiency, reducing the real estate footprint, and overall process improvement. ⁹⁴ Many of initiatives that were employed by the HMRC could be leveraged by Hacienda, including but not limited to:

- Partnerships with private banks to reduce real estate and personnel footprint
- Non-personnel spend (e.g., support service consolidation) and procurement optimization
- Initiatives related to digitization and general process and efficiency improvements

While Hacienda must target gross reductions of 25%, 40% of these reductions should be **reinvested in compliance activities**, providing the budget for hiring additional Hacienda employees needed to implement new compliance activities, as well as for technology investment.

⁹³ Includes AAFAF and all agencies in Hacienda / OCFO grouping

⁹⁴ National Audit Office, "Reducing Costs in HM Revenue & Customs," 2011

The total savings expectation of 15% is expected to be realized by FY2021. Two thirds of those savings should be realized by FY2020.

Other OCFO personnel and non-personnel efficiencies

The Office of Management and Budget, Office of Administration and Transformation of Human Resources, and the General Services Administration must achieve significant savings as a result of consolidation under the OCFO umbrella. These agencies are expected to reduce total payroll by 45% and non-payroll addressable expenses (i.e., procurement and a portion of enrolled expenses) by 30% by FY2021. Two thirds of these savings should be achieved by FY2020.

12.9.3 Implementation of reforms

To achieve the 2019 Fiscal Plan's savings projections, reforms within the Hacienda / OCFO grouping must be implemented according to the schedule described in **Exhibit 57**. Implementation of measures is delayed for this grouping. Procurement initiatives are delayed, and OCFO has not presented a consolidation plan or progress on consolidating shared services.

EXHIBIT 57: HACIENDA / OCFO GROUPING KEY IMPLEMENTATION MILESTONES

Areas of focus	Action item	Deadline
Consolidate agencies	Pass legislation of merging entities	September 1, 2018
	Finalize system mergers between entities	June 30, 2019
	Complete all process and organizational changes	June 30, 2020
Transform Hacienda efficiencies	Identify major contract opportunities and estimate value	October 31, 2018
	Develop strategy for footprint consolidation and digitalization	November 1, 2018
	Start re-negotiations of target contracts	December 1, 2018
	Identify retail banking partners	December 31, 2018
	Roll out trial of consolidating services in bank real estate and start site closures	March 31, 2019
	Finalize plan for footprint reduction informed by pilot	June 30, 2019
	Review of procurement savings achieved and develop strategy for FY20	June 30, 2019
	Launch consolidation in all municipalities and finalize closures	June 30, 2021
	Assess impact of digitalization and footprint consolidation and identify future opportunities	Ongoing
Reduce non- Treasury back- office and non- personnel	Complete capacity analysis for new merged entity	September 1, 2018
	Conduct scan of non-personnel spend and prioritize by major opportunities for savings	September 1, 2018
	Define plan to execute on priority opportunities	November 1, 2018
	Publish plan for new organizational structure with plans for reduction in personnel	November 1, 2018
	Review personnel rightsizing in light of above initiatives	June 30, 2019
	Complete personnel rightsizing to end state	June 30, 2021
	Reduce non-personnel spend by 30%	Ongoing

12.10 **Department of Economic Development (DDEC)**

12.10.1 Current state and future vision for the Department of Economic Development

DDEC includes a consortium of agencies critical to **incentivizing and managing the economic recovery of Puerto Rico's private sector**. To promote growth, DDEC is driven by a strategic economic plan to promote high-impact projects, reenergize existing industries, and promote new strategic initiatives. In addition, DDEC manages a variety of programs on the Island intended to promote Puerto Rican entrepreneurship, youth employment, and other critical economic development functions. In the aftermath of

Hurricane Irma and Maria, these programs will be crucial for the vitality of the Puerto Rican economy through increasing participation in the job market and attracting new business to the Island.

The agencies to be consolidated are as shown below (Exhibit 58).

EXHIBIT 58: LIST OF AGENCIES IN FUTURE STATE DEPARTMENT OF ECONOMIC DEVELOPMENT GROUPING

Department of Economic Development and Commerce (DDEC)	6 Commonwealth of Puerto Rico Regional Center Corporation	
Puerto Rico Industrial Development Company	7 Local Redevelopment Authority for Roosevelt Roads	
Puerto Rico Trade and Export Company	8 Permits Management Office	
Office of Industrial Tax Exemption	9 Puerto Rico Tourism Company	
State Office of Energy Policy	10 Planning Board	

The agencies within the grouping are responsible for a variety of efforts to maintain a robust economic marketplace within Puerto Rico, including supervising public policy, creating and retaining jobs, attracting capital investment, and promoting tourism. However, the diffusion of these weighty responsibilities across so many agencies has led to an **inconsistent approach to overall economic development**. For instance, as of April 2018, the Government lacked a coherent development strategy between the existing incentives code and the initiatives pursued by agencies within DDEC, and until recently there had been no single entity solely responsible for incentivizing foreign direct investment in Puerto Rico.

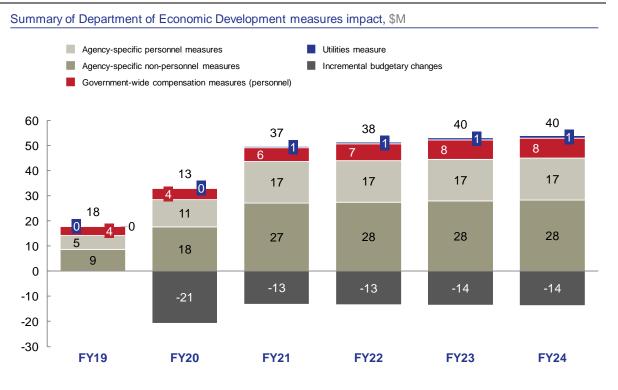
Under the new grouping construct, each entity within DDEC grouping should have **clearly defined responsibilities and governance structures** that limit costs moving forward and prevent overlapping duties among agencies in the grouping (e.g., specific marketing / promotion agency mission should be separate from the corporate development / retention agency). DDEC should also be able to clearly distinguish its activities from those of Discover Puerto Rico and Invest Puerto Rico. Finally, DDEC should be better able to coordinate its efforts to spur economic development by providing clear goals and metrics for success.

12.10.2 Efficiency measures for DDEC

The following stipulations will govern the future state of DDEC:

DDEC must achieve \$10.9 million in personnel savings, \$17.6 million in non-personnel savings, \$4.4 million in compensation reduction savings, and \$0.3 million in utility savings in FY2020. Additionally, there will be investments of \$20.6 million in FY2020 to allow for increased spending on the promotion of tourism and economic development in Puerto Rico. Refer to **Exhibit 59** for annual personnel and non-personnel savings that must be achieved through FY2024.

EXHIBIT 59: DEPARTMENT OF ECONOMIC DEVELOPMENT MEASURES SUMMARY OF IMPACT



Personnel efficiencies

DDEC should **reduce front-line personnel** by 20% to ensure a streamlined, efficient organization. A government analysis identified a redundancy in service of back-office personnel across DDEC.⁹⁵ DDEC could **consolidate back-office operations** of the newly-merged agencies as detailed in *Sections 12.2 and 12.3*.

Non-personnel efficiencies

DDEC must pursue a variety of initiatives to **reduce non-personnel spend**, primarily centered on procurement optimization and digitization of operations (e.g., digitizing the permit application process), as detailed earlier in Chapter 12.

12.10.3 Implementation of reforms

To achieve the 2019 Fiscal Plan's savings projections, reforms within the Department of Economic Development grouping must be implemented according to the schedule described in **Exhibit 60**. DDEC has consolidated 4 of 11 agencies into DDEC (including all legally mandated agencies), and recently moved 4 entities to unified accounting and payroll system. Procurement savings are larger than expected savings achieved by reducing rent. However, personnel and compensation measures remain at risk based on budget to actuals reports.

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⁹⁵ DDEC analysis, 2018

EXHIBIT 60: DEPARTMENT OF ECONOMIC DEVELOPMENT GROUPING KEY IMPLEMENTATION MILESTONES

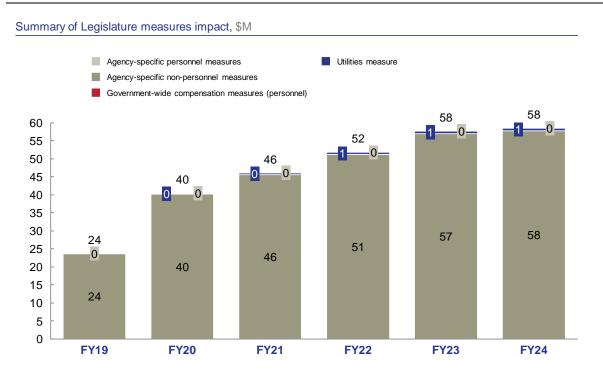
Areas of focus	Action item		
	Pass legislation of merging entities	September 1, 2018	
Consolidate agencies	Finalize system mergers between entities	June 30, 2019	
	Complete all process and organizational changes	June 30, 2020	
	Complete capacity analysis for new merged entity	September 1, 2018	
Right-size the number of employees	Publish plan for new organizational structure with plans for reduction in personnel – both front line and back office	November 1, 2018	
	Full implementation of agency efficiency plan	June 30, 2019	
	Conduct scan of non-personnel spend and prioritize by major opportunities for savings	September 1, 2018	
Optimize non- personnel spend	Define plan to execute on priority opportunities	November 1, 2018	
	Reduce non-personnel spend by 30%	Ongoing	

12.11 Legislative Assembly

As of FY2017, the size of the Puerto Rican Legislative Assembly was significantly larger than comparable legislatures in U.S. mainland states, even when accounting for the demands of full-time legislatures and excluding the money that the Legislature spends on supporting non-profit organizations. Whereas Puerto Rico spent \$34.16 per citizen on addressable legislature expenditure, the weighted average expenditure per capita for U.S. mainland legislatures was \$13.11. Similarly, Puerto Rico has outsized spend on a percentage of GDP basis. Reductions to the size and funding of the Legislature are necessary to bring it in line with benchmarks and optimize government funds.

The Legislature must achieve \$40.2 million in non-personnel savings and \$0.2 million in utility savings in FY2020. Refer to **Exhibit 62** for annual savings that must be achieved through FY2024.

EXHIBIT 61: LEGISLATIVE ASSEMBLY MEASURES SUMMARY OF IMPACT

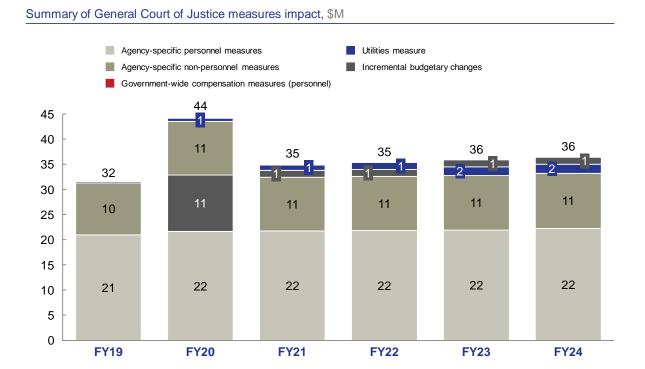


12.12 General Court of Justice

The General Court of Justice, although to a lesser extent, was similarly over U.S. mainland cost benchmarks in FY2018 (by $\sim 35\%$ when compared to the median cost mainland full-time Judiciaries) and will therefore also experience agency efficiency measures equivalent to a 10% reduction in their annual budget.

Courts must achieve \$21.6 million in personnel savings, \$10.6 million in non-personnel savings and \$0.6 million in utility savings in FY2020. Refer to **Exhibit 62** for annual savings that must be achieved through FY2024.

EXHIBIT 62: GENERAL COURT OF JUSTICE MEASURES SUMMARY OF IMPACT



12.13 Elections Commission

On January 21, 2019, the Oversight Board sent the Governor and Legislature a recommendation, pursuant to Section 205(a), that the Government adjust the operations of the State Elections Commission to fluctuate with the electoral cycle and restructure its organization to become more efficient. On April 22, 2019, the Governor responded to this recommendation, pursuant to Section 205(b), agreeing that the State Elections Commission's operations must be restructured but declining to adopt the Oversight Board's recommendation.

The Oversight Board has reviewed and considered the Governor's response, as well as relevant data from similar agencies in states such as Maryland and Wisconsin, and has determined that its original recommendation is an appropriate one. Accordingly, pursuant to Section 201(b)(1)(K), the Oversight Board adopts its original recommendation. The State Elections Commission must achieve total savings of 32% of FY2018 expenditures by FY2021. This will create \$9.5 million in run-rate savings annually by FY2024.

12.14 Transfer of ownership of WIPR

On January 11, 2019, the Oversight Board sent the Governor and Legislature a recommendation, pursuant to Section 205(a), that the Government transfer ownership of the Public Broadcasting Corporation to a private non-profit. On April 11, 2019, the Governor responded to this recommendation, pursuant to Section 205(b), accepting in principle the Oversight Board's recommendation, expecting that it be implemented on or before June 30, 2020. Moreover, the Governor asserted that appropriations to the Public Broadcasting Corporation should continue at a sustainable level after ownership has been transferred to a private non-profit.

The Oversight Board has reviewed and considered the Governor's response and has determined that its original recommendation is an appropriate one. Accordingly, pursuant to Section 201(b)(1)(K), the Oversight Board adopts its original recommendation. The Public Broadcasting Corporation must be transferred from Government ownership by March 31, 2020. Therefore, the Public Broadcasting Corporation will be provided with funding to operate through March 31, 2020. Moreover, the Public Broadcasting Corporation will not receive any appropriations from the Commonwealth after March 31, 2020, when ownership has been transferred to a private non-profit. This will create annual savings of ~\$12.9 million starting in FY2021.

12.15 Agencies that promote public integrity and transparency

There is wide agreement that to drive a successful fiscal transformation within the Government of Puerto Rico, it will be important to promote public integrity and transparency at every turn. Within the Government, several agencies are dedicated to maintaining oversight and fiscal responsibility; namely, the Office of the Comptroller and the Office of Government Ethics. In line with the priorities of the Governor, the functioning of these agencies is critical to achieving the goals and ensuring the long-term sustainability of the 2019 Fiscal Plan. Accordingly, the budgets for the Office of the Comptroller and the Office of Government Ethics will not be affected by agency-specific rightsizing measures but must still achieve Christmas bonus, uniform healthcare, and utilities savings.

12.16 All other agencies

Exhibit 63 shows the summary of the savings that each grouping must achieve for FY2019 to FY2024.

To date, implementation progress and engagement has varied a across the smaller Government agencies. Some agencies are developing meaningful tools and creative solutions to achieve savings (e.g., the Department of Agriculture planning digital solutions to reduce personnel or the Department of Environment's green tourism initiative which could create job opportunities and tax revenues) but many have not planned to implement these effectively resulting in slow progress to reach their ambitious targets. Overall, the lack of consolidation legislation is hampering agencies from achieving savings, despite efforts to reduce personnel and non-personnel spend through diverse initiatives.

Grouping	FY19	FY20	FY21	FY22	FY23	FY24
Agriculture	4.5	26.6	30.2	30.8	31.5	32.0
Automobile Accident Compensation Administration	6.2	15.3	18.9	19.8	20.8	21.1
Culture	2.4	5.3	5.8	6.1	6.5	6.5
Environmental	9.0	-3.6	0.6	1.6	2.7	2.7
Executive Office	12.2	16.5	20.6	22.8	25.3	25.7
Finance Commission	1.6	3.3	4.2	4.4	4.6	4.7
FOMB	5.3	11.0	11.0	11.1	11.2	11.4
Institute of Statistics	0.2	0.4	0.5	0.5	0.5	0.6
Justice	4.0	14.3	19.1	20.5	22.0	22.3
Labor ²	6.3	12.6	18.2	19.5	21.0	21.3
Land	1.5	2.8	4.0	4.2	4.4	4.5
Ombudsman	0.9	1.6	2.4	2.6	2.8	2.8
Public Works	19.1	26.6	45.3	47.8	50.4	51.1
State	1.3	11.1	3.4	3.5	3.6	3.7
State Insurance Fund Corporation	17.5	60.3	80.4	84.5	88.6	89.9
Families & Children	8.8	14.0	36.5	42.3	49.1	49.8
Housing ²	6.9	26.0	24.4	27.1	29.9	30.3
Universities ²	0.8	1.6	1.9	2.1	2.3	2.3
Utilities Commission	0.8	2.3	2.2	2.4	2.5	2.6
Independent Agencies	11.6	24.7	43.7	45.8	47.9	48.6
Transparency & Control Entities	1.0	1.0	1.0	1.0	1.0	1.0
Closures	1.1	3.0	2.4	2.6	2.8	2.9

¹ Savings include additional personnel savings achievable through compensation measures (payroll freeze, uniform healthcare, Christmas bonus) as well as power and water savings 2 Government, place as of May 2019, do not propose consolidation all appendies in those groupings, but equipps targets will remain the same and as such are included here for presentation.

Exhibit 64 details the implementation schedule for all other agencies within the Government that must be followed to achieve the 2019 Fiscal Plan's savings projections. To date, implementation progress has been inconsistent across the Government.

EXHIBIT 64: ALL OTHER AGENCIES GROUPINGS KEY IMPLEMENTATION MILESTONES

Areas of focus	Action item	Deadline	
	Pass legislation of merging entities	September 1, 2018	
Consolidate agencies	Finalize system mergers between entities	June 30, 2019	
	Complete all process and organizational changes	June 30, 2020	
Rightsizing personnel	Complete capacity analysis for new state entity	September 1, 2018	
	Publish plan for new organizational structure with plans for reduction in personnel	November 1, 2018	
	Full implementation of agency efficiency plan	June 30, 2019	
	Conduct scan of non-personnel spend and prioritize by major opportunities for savings	September 1, 2018	
Optimize non- personnel spend	Define plan to execute on priority opportunities	November 1, 2018	
	Reduce non-personnel spend by Fiscal Plan targets	Ongoing	

Chapter 13. HEALTHCARE REFORM

13.1 Current State of Puerto Rico's Medicaid program

Prior to Hurricane Maria, $\sim 38\%$ of Puerto Ricans received their health coverage through the Commonwealth's state-run Medicaid program; this was the highest share of Medicaid/CHIP-funded health insurance coverage in America, with the next highest state, West Virginia,

covering only 29% of its population under Medicaid/CHIP health plans. ⁹⁶ In addition to its large coverage population, has Puerto Rico lagged mainland states in both health outcomes and access. Puerto Ricans face higher rates of chronic conditions like hypertension (11.3%-points higher than the U.S. mainland), diabetes (4.4%-points higher), and asthma (1.6%-points higher). ⁹⁷ Only 28% of the 62,000 Medicaid members with diabetes and 17% of the 132,000 Medicaid members with hypertension are in the respective disease management programs. Puerto Rico also has higher premature birth and infant mortality rates, ⁹⁸ and higher rates of adults reporting fair or poor health. ⁹⁹ At the same time, 72 of Puerto Rico's 78 municipalities are deemed "medically underserved areas", ¹⁰⁰ with 500 doctors leaving per year (pre-Maria). Puerto Rico has half the rate of specialists (e.g., emergency physicians, neurosurgeons) as compared to the mainland in critical fields. ¹⁰¹

Puerto Rico's Government-funded health plan, Vital, covers individuals through three primary funding sources: Federally-matched Medicaid funds, the Children's Health Insurance Program (CHIP), and the Commonwealth's self-funded insurance program for low-income adults who do not qualify for federally-matched Medicaid. An additional ~8% of the Puerto Rican population receives some benefits from the Government as part of the Platino program, which supports Medicare Advantage recipients who also qualify for Medicaid (also known as "dual-eligible"). Annually, these programs collectively cost ~\$3 billion (as of FY2018), with the Commonwealth projected to be responsible for the vast majority of costs due to caps on federal matching (see *Section 5.1.2* for more information on Medicaid federal funds).

Like the rest of the U.S., Puerto Rico faces real and growing challenges with rising healthcare costs, with premiums growing significantly faster than inflation. Even with some cost containment measures in place, per-member per-month (PMPM) disbursements rose 6.3% from FY2017 to FY2018 and are projected to rise by nearly 32% from FY2018 to by FY2024 without deliberate measures from the Government to control per capita costs.

The Bipartisan Budget Act of 2018 (BBA 2018) has provided the Commonwealth temporary relief from raising healthcare costs by expanding the amount of federal reimbursement over the next 18 months. Starting in September 2019, however, the Commonwealth will hit a "Medicaid cliff" whereby it will be responsible for multi-billion-dollar annual healthcare expenditures unseen since the Affordable Care Act provided additional federal funding in 2011. It is crucial, therefore, that ASES take advantage of the additional runway provided by the BBA funding to put in place reforms that reduce long-term health expenditure growth rates.

13.2 Measures for healthcare reform

The goal of the Puerto Rican public health insurance system is to fund high-quality health care services to all residents in need and, in doing so, cultivate a healthier population, especially as it relates to lowering outsized rates of chronic conditions. To ensure the system can continue to support the most vulnerable populations who rely on its services, Puerto Rico will need to

⁹⁶ Kaiser Family Foundation, "Medicaid State Fact Sheets: Percent of People Covered by Medicaid/CHIP, 2015"

⁹⁷ CDC (Centers for Disease Control and Prevention), "BRFSS Prevalence and Trends Data," 2015-2016. Behavioral Risk Factor Surveillance System

⁹⁸ Puerto Rico infant mortality rate is 6.4 per 1000 (2016) vs. U.S. mainland 5.8 per 1000; premature birth rate is 11.8% vs. 9.6% in U.S. mainland. "Puerto Rico," World Factbook (Washington, DC: CIA)

^{99 35.4%} of Puerto Ricans report fair or poor health, versus 17.9% U.S. average, and 19.3% in Florida and 22.0% in Mississippi (two most comparable states). Table 3, Krista Perreira et al. Urban Institute. Jan 2017. "Environmental Scan of Puerto Rico's Health Care Infrastructure"

¹⁰⁰ Areas with a shortage of personal health services, e.g., areas or populations that have too few primary care providers, high infant mortality, high poverty, and/or high older adult population

¹⁰¹ U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, "ASPE Issue Brief: Evidence Indicates a Range of Challenges for Puerto Rico Health Care System" (Jan 12, 2017)

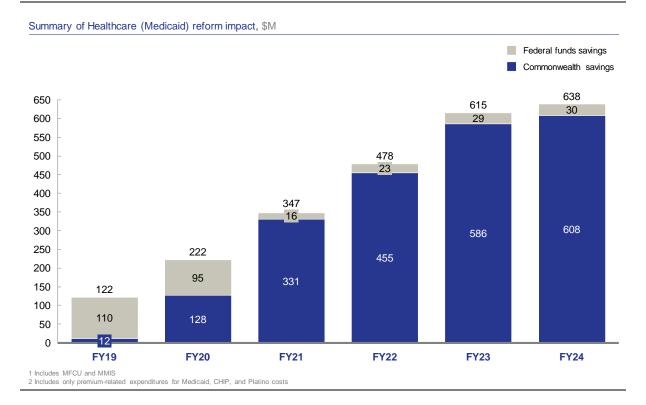
improve the efficacy of its health insurance plan, specifically "bending the curve" on premium inflation reflective of escalating costs for health care delivery on the Island.

The remainder of this section outlines several categories of actions the Government will take to both to curb the growth rate in per capita health care expenditure as well as shift the health system overall toward higher-value care. In all the below required measures, the plan seeks to avoid reduction in service quality — and in many cases reforms are expected to improve service quality — for beneficiaries. However, the 2019 Fiscal Plan does not preclude the possibility of optional benefit reductions and cost-sharing should more value-based measures fail to achieve the savings targets outlined here.

Reflective of reduced enrollments, post-hurricane implementation challenges (e.g., provider shortages), and the importance of delivering quality care to the ~38% of Puerto Ricans who rely on Vital for medical insurance, this 2019 Fiscal Plan reduces the total savings target across FY2020-FY2024 by \$1.4 billion and adjusts the ramp-up of expenditure reduction measures to provide additional time for implementation. Total run-rate savings must reach ~\$638 million by FY2024 (off the FY2024 baseline of approximately \$3.3 billion). After FY2024, the savings continue to increase as baseline expenditures increase (**Exhibit 65**), but absent further action by future governments, the per capita cost of healthcare will grow with long-term healthcare inflation rates, creating a significant deficit. The Government will still act urgently to implement value-based reforms that deliver both improvements in health services and savings to the Commonwealth, including building the infrastructure and data systems required to execute more advanced payment reform models and quality monitoring across the Island.

The measure savings in the 2019 Fiscal Plan are designed to lower premium expenditures across the multiple public health programs on the Island (namely Medicaid and CHIP). Due to the nature of the CHIP reimbursement program, the targets recognize that the federal government will realize $\sim 5\%$ of premium expenditure savings at run-rate based on current statute. In FY2020, the federal government will realize an even larger share of premium savings given the continuance of BBA and ACA funding in the first half of the fiscal year. While the Government must achieve all savings to curb long-term costs, the 2019 Fiscal Plan surplus will only consider savings that accrue to the Commonwealth.

EXHIBIT 65: HEALTHCARE REFORM SUMMARY OF IMPACT



13.2.1 Implement a single region managed care model

ASES can reduce MCO administrative costs by switching from the current system of nine regions, each with a single MCO provider, to a geographically unconstrained competitive system with multiple MCOs serving the entire Island. This new single region MCO model, Vital, should produce increased economies of scale for administrative operations and will lower costs through greater competition and incentives to enforce efforts to lower the cost of care. ASES has already been moving the MCOs towards improved Medical-Loss Ratios (MLRs), constraining the share of their PMPM costs not used for medical services. In FY2019, ASES implemented an MLR of 92% (8% cap on administration and profits).

13.2.2 Enrollment verification

In addition to overpayment for eligible beneficiaries, ASES faces a challenge in ensuring it is serving the proper beneficiaries—and preventing those who are ineligible from receiving benefits. Over-enrollment typically occurs when the system fails to catch residents who have private insurance, are in the corrections system, have moved to other states, or are deceased. Data system limitations (e.g., limited data sharing with other systems; manual dis-enrollment after eligibility expiration) mean that it often takes years to dis-enroll ineligible members, and many are never removed. Over-enrollment could be identified through coordination of benefits, interagency data sharing, state-specific MOUs, and the national Public Assistance Reporting Information System (PARIS) and T-MSIS Medicaid interstate match. 102

¹⁰² MACPAC, "Medicaid and CHIP in Puerto Rico," report, February 2018

13.2.3 Reduce fraud, waste, and abuse (FWA)

The U.S. Government Accountability Office found evidence that MCOs have not consistently reported improper payments to providers billing to the system. Further, it found that many MCOs face conflicts of interest in finding and eliminating fraud¹⁰³. Typical waste, fraud, and abuse reduction programs in other state Medicaid programs and health insurers have been able to achieve 1-3% cost savings. These savings have been reached through: pre-payment review (e.g., reviewing claims before payment to identify outliers/issues); auditing and enforcement units to investigate suspicious behavior; advanced analytics capabilities to review many actions to identify inefficient or fraudulent activities in post-payment review, such as identification of "impossibility" coding (e.g., billing for over 24 hours of service in one day); or frequently repeated or high value procedures; and long term policy or organizational transformation.

To combat FWA:

- The Department of Justice will fully operationalize a Medicaid Fraud Control Unit (MFCU)—which it has already launched—to identify and prosecute fraudulent charges
- The Office of Medicaid will continue to deepen its capabilities and use of its newly established Medicaid Management Information System (MMIS) to track utilization, claims, and provide the data inputs for advanced analytics assessments to identify inappropriate spending
- Build new capabilities for using advanced analytics to obtain reimbursement for improper payments and to identify and eliminate the systematic causes that enabled the problematic activities in the first place

13.2.4 Implement a uniform fee schedule for providers

One way ASES has been able to put controls on spend growth is by working with MCOs to implement a new fee schedule for providers. The updated schedule, which went into effect on July 1, 2017, provided 70% of the Medicare reimbursement, a sharp reduction for some specialty services on the Island (laboratory and radiology, in particular), as it reduced the PMPM by an estimated \$3.52 in FY2018. 104 During the period of BBA funding, this fee schedule reduction was relaxed in response to a sharp increase in emigration of specialty providers that was hindering delivery of necessary care. After the expiration of BBA in September 2019, ASES will need to reinstate a fee schedule to manage costs associated with specialty reimbursement.

13.2.5 Improve quality relative to cost

Pursuing value-based improvement initiatives with demonstrated success can help the Commonwealth "bend the curve" on healthcare inflation without jeopardizing — and in fact while improving —health outcomes across the system. Similar value-based programs have been piloted in other states, and typically have saved between 2-10% of costs. In Puerto Rico, value-based reforms may result in lower-than-average savings due to the breadth of other simultaneous savings measures being implemented for Vital and unique post-Hurricane challenges such as a potential increase in behavioral health needs. Nonetheless, these structural changes to reimbursement and care delivery present the most viable path to long-term sustainability for the program. Examples of specific initiatives to be undertaken in this measure include:

 ¹⁰³ GAO "Medicaid and CHIP Increased Funding in U.S. Territories Merits Improved Program Integrity Efforts," April 2016
 104 FY2018 Milliman Actuarial Certification

- Improved coordination of care: New approaches that emphasize care coordination and align incentives between patients, providers, and payors can produce improvements in health outcomes while lowering costs. Given the preponderance of chronic conditions and potential rising behavioral and mental health needs in the wake of Hurricane Maria,105 better access and coordination of mental health services will become increasingly important. Care coordination models like patient centered medical homes which empower patients to work closely with a primary care provider to manage treatment plans across multiple care providers have been quite effective at improving outcomes for members with chronic conditions. ¹⁰⁶ ASES will serve as a coordination point for care coordinating organizations throughout the community, ranging from MCOs themselves to education and faith-based community organizations.
- Reduced Emergency Room (ER) visits: Prior to Hurricane Maria and the reforms, Puerto Ricans utilized the ER three times as often as peers on the U.S. mainland, ¹⁰⁷ with estimates as high as 90% of ER visits occurring for non-emergency care that could be treated in lower cost settings. Successfully shifting unnecessary ER visits to lower-cost settings, such as primary care offices or urgent care, could save tens of millions of dollars annually. Vital could reduce ER utilization through several means, including patient education, increased ER co-pays, or changes to reimbursement policies. ¹⁰⁸
- Reduced inpatient length of stay: Puerto Rico's inpatient length of stay was 1.5 times the U.S. average in 2014. 109 MCOs can incentivize reduced hospital readmissions and length of stay through improved discharge planning and increased staffing to manage weekend discharges. Some MCOs have already implemented such reforms in Puerto Rico.
- Adjusting MCO payment models: ASES will have to continue to mandate and incentivize changes to MCO provider payment models to promote greater accountability and better align care delivery to outcomes amongst providers. Best practice value-based payment models from other managed care settings include direct pay-for-performance quality bonuses, providing fixed payments for a bundle of services required to treat a specific condition, and providing special incentives to care for members with high-cost needs, such as behavioral health.

13.2.6 Reduce pharmacy spend

Prescription drug coverage is the largest category of spend in the Commonwealth Medicaid program, contributing nearly a third of the total cost in treating the average patient. Nearly half of this spend comes from specialty drugs.

Puerto Rico faces structurally higher prices than the mainland because, unlike U.S. states, it cannot participate in the federal Medicaid Drug Rebate Program (MDRP) and may only seek voluntary or supplemental rebates. That said, ASES can lower the cost of prescription drug

¹⁰⁵ Thomas Huelskoetter, Center for American Progress, "Hurricane Katrina's Health Care Legacy" (August 15, 2015)

¹⁰⁶ Patient-Centered Primary Care Collaborative, "Benefits of Implementing the Primary Care Medical Home A Review of Cost & Quality Results, 2012" (Sept 2012)

¹⁰⁷ JEL Consulting analysis (Dec 30, 2106) of ASES data and Puerto Rico Community Survey, Public Use Microdata, 2014. Estimates exclude Platino beneficiaries

¹⁰⁸ See, e.g., Schwartz et al. Copayment levels and their influence on patient behavior in the emergency room utilization in an HMO population. Journal of Managed Care Medicine. 2012; Wallace et al. How effective are copayments in reducing expenditures for low-income adult Medicaid beneficiaries? experience from the Oregon health plan. Health Services Research 2008; Lesley et al. Reducing frequent visits to the emergency department: a systematic review of interventions. PLOS. 2015

¹⁰⁹ As of 2014. JEL Consulting analysis (Dec 30, 2106) of ASES data and Puerto Rico Community Survey, Public Use Microdata, 2014. Estimates exclude Platino beneficiaries

¹¹⁰ Information obtained from Health Insurance Administration

coverage by replacing higher cost drugs with cheaper, equally effective alternatives, driving increased use of generics and imposing utilization controls. These initiatives resulted in negotiated savings of \$4.31 PMPM in Mi Salud's (now Vital) FY2018 contracts. However, to sustain these savings, MCOs must engage in ongoing monitoring and enforcement of policy changes to further refine drug coverage lists and utilization management policies due to changing prescription patterns.

13.2.7 Cost-sharing

As noted earlier, in the event that the above measures fail to achieve the required run-rate savings target, additional measures will need to be implemented to hit expenditure reduction targets. One of these measures is to impose cost sharing on specific services to disincentivize high-cost, low-impact behavior, such as visiting an ER for non-emergency services or using certain non-preferred drugs. Co-pays have been shown to reduce used of affected services, and therefore should not apply to preventive care or other areas that reduce net health system costs, such as family planning services. Any required co-pay shall be determined on a service-by-service basis to selectively disincentivize high-cost, low-impact activities; further, co-pays will be implemented progressively, scaled to member income while exempting those without income and CHIP members.

13.2.8 Optional benefits

Medicaid requires all states to cover certain services, such as hospital stays, physician visits, preventive health services, family planning, and pregnancy-related care. Other benefits are considered optional, including: prescription drugs; physical, occupational, and speech therapy; dental; podiatry; optometry and glasses; prosthetics; chiropractor services; private duty nursing; hospice; and respiratory care services. Some of these optional benefits are provided by every state (such as prescription drug coverage), while others are covered by fewer than half of states. 4.1% of total FY2018 Mi Salud (now Vital) payments¹¹¹ are related to the following categories of benefits coverage that at least one other state or territory does not cover (**Exhibit 66**):¹¹²

¹¹¹ When adding back in the \$0.59 PMPM attributable to CHIP coverage that would not be subject to reductions or cost sharing

¹¹² Kaiser Family Foundation Medicaid Benefits Data Collection, Oct 1, 2012 data (latest available as of Nov 2017). 2 states do not cover prosthetics, while every state covers durable medical equipment and supplies. 33 states do not cover private duty nursing, while every state covers home health services. 20 states do not cover occupational therapy; data was not available on outpatient PT/OT/ST specifically. Puerto Rico data from FY2018 Milliman Actuarial Certification

Optional benefit type	FY18 PMPM, \$	FY18 projected cost, \$M	States/territories not covering, %
Dental	\$4.38	65.5	7%
DME and supplies, prosthetics	\$1.53	22.9	4%
Private duty nursing/home health	\$0.99	14.8	59%
Professional – PT	\$0.67	10.0	30%
Professional – Vision, hearing, and speech exams	\$0.45	6.7	29%
Benefits glasses/contacts	\$0.14	2.0	18%
Outpatient facility – PT/OT/ST	\$0.04	0.6	36%
Less CHIP portion of benefits ¹	\$(0.59)	(10.9)	
Total	\$7.61	112	
1 CHIP beneficiaries excluded from any potential benefit reduction	1		

As a result, another second stop-gap measure could be to reduce Vital coverage for select optional benefits, either by eliminating some optional benefits, imposing various levels of cost-sharing for remaining benefits, or restricting access. Optional benefit coverage reductions would affect Federally- and Commonwealth-eligible Vital members, but not CHIP members.

13.2.9 Implementation plan and enforcement of healthcare reform

Exhibit 67 provides a summary of key activities, milestones and timeline for implementing the required healthcare measures. To date, ASES has made progress on several of these measures, including transitioning members to the new Vital program in November 2018. The management care agreements under Vital, among other reforms, include new, payment-linked quality thresholds. Puerto Rico has also been recognized by the Centers for Medicare & Medicaid Services (CMS) for its progress in standing up its first Medicaid Fraud Control Unit (MFCU), operating through the Department of Justice, and improving the capabilities of its Medicaid Statistical Information System (MSIS). Still, even more effort will be required in the coming months to put in place the infrastructure and capabilities required to achieve the savings targets outlined in this Fiscal Plan.

Areas of focus	Action item	Deadline
	Release RFP, publish data-book, hold conferences, and develop proposals for FY2019 MCO contract	December 31, 2017
	Receive proposals, negotiate rates, award and signed FY2019 MCO contract	June 30, 2018
	Receive adjudication of FY2019 MCO contract from CMS	October 31, 2018
	■ Implement FY2019 MCO contract	November 1, 2018
	Build out analytics and quality assessment tools	December 31, 2018
	Conduct first quarterly audit and review of FY2019 MCO contract	March 1, 2019
Overall New	Publish first HEDIS report	March 1, 2019
Healthcare Model	Complete negotiation of rates and finalize amendments to the MCO contract for FY2020	August 15, 2019
	Conduct second quarterly audit and review of FY2019 MCO contract	May 1, 2019
	Receive approval of negotiated premiums and amendments to MCO contract for FY2020	Oct 15, 2019
	Achieve \$222 in savings from new island-wide healthcare model	July 1, 2020
	Achieve \$347 in savings from new island-wide healthcare model	July 1, 2021
	Achieve \$478 in savings from new island-wide healthcare model	July 1, 2022
	Achieve \$615 in savings from new island-wide healthcare model	July 1, 2023
Other	 Establish a functional Medicaid Management Information System (MMIS) to track utilization, claims, and provide the data inputs for advanced analytics assessments to identify inappropriate spending, while also leveraging the national Public Assistance Reporting Information System (PARIS) 	January 1, 2018
Healthcare Cost Savings Initiatives	 Pass legislation to establish a Medicaid Fraud Control Unit (MFCU) under PR Department of Justice to identify and prosecute fraudulent charges 	June 30, 2018
mitiatives	Receive certification of MFCU from HHS Secretary	September 30, 201
	Fully operationalize MFCU	December 31, 201

Chapter 14. TAX COMPLIANCE AND FEES ENHANCEMENT

14.1 Current state and future vision for tax environment

Puerto Rico's current tax system suffers from its structural complexity, instability, internal inconsistency, inefficient administration and inadequate enforcement. This has fueled a culture of tax evasion, promoted by a lack of adequate enforcement personnel, technology and process. Top marginal tax rates are high relative to U.S. federal and state taxes. Much of the Government's revenue is also overly concentrated in collections from a handful of multinational corporations. To compensate for this unevenness, the Government has issued an assortment of credits, deductions, and incentives that add to the system's complexity and further erode the tax base. Limited audit and enforcement in recent years has also resulted in a lack of compliance amongst tax filers, who assess that the likelihood of punishment is low and the ability to negotiate consensual settlement agreements if caught are high.

Due to its compliance and collections issues, the Commonwealth has not been able to drive as many revenues from taxes as it should each year.

In response to these challenges, the government reports it has already started implementing compliance-related changes within Hacienda. It is driving improvements in its culture and organization to boost enforcement capabilities, streamlining the process of filing taxes and reducing complexity in the system to lighten the burden of compliance on taxpayers. These efforts have already resulted in some success: in 2012, SUT compliance stood at 56%, and by 2016 had improved by 12 percentage points, to 68% compliance.¹¹³ Moving forward,

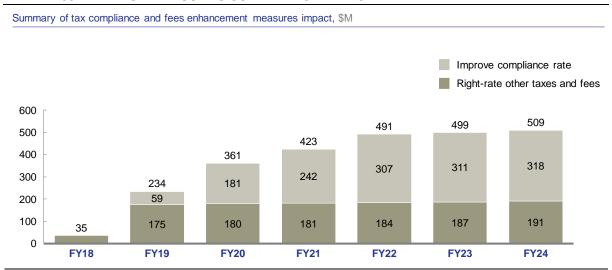
¹¹³Departamento de Hacienda, November 2016

Commonwealth-commissioned tax reform report models estimate that Puerto Rico could reach 75% sales tax compliance. 114

14.2 Administrative tax initiatives to increase revenue collections

By driving administrative reform, the Commonwealth must increase revenues by \$2.5 billion over FY2019-2024, as shown below (**Exhibit 68**). To capture impact, measures must be implemented in full by FY2019.

EXHIBIT 68: REVENUE MEASURES SUMMARY OF IMPACT



14.2.1 Improve compliance rate

Given the progress to date in improving compliance rates and the ongoing gap to reach mainland performance, **the Government must target a 5% net uplift in annual revenues due to enhanced compliance by FY2022** across the major tax lines (personal income tax, corporate income tax, and SUT) — inclusive of implementation costs. Such an improvement would also be in line with improvements seen in other tax transformations. ¹¹⁵

Recent compliance efforts in the Commonwealth have largely focused on collections outreach activities, obtaining one-time back taxes owed through a collections call center, flexible payment plans, and a large corporate taxpayer-focused team (with a longer-term goal of establishing a permanent separate unit). In the future, emphasis should shift towards **initiatives that promote a culture of compliance** to boost voluntary payment. The goal should be to reduce the cost of compliance while simultaneously raising the cost of noncompliance, through a combination of an increased likelihood of being caught while not paying taxes owed and more effective and enforceable penalties. ¹¹⁶

■ Use new systems and processes to identify and remediate non-payment. Hacienda will create a "premium return system" for individual and corporate taxpayers that enables taxpayers to claim certain deductions and exemptions only if their return is prepared by a certified public accountant following agreed upon procedures; the CPA's

¹¹⁴The report did not address how long it would take to reach this end state. "Commonwealth of Puerto Rico Tax Reform Assessment Project, Unified Tax Code of Puerto Rico: Tax Policy Implementation Options General Explanation of Principal Options" KPMG (October 31, 2014)

¹¹⁵ Analogous case studies include Panama, Jamaica, and Spain, which saw 1.0 to 2.5 percentage point increases in tax ratio relative to GDP through comprehensive tax overhauls, which included compliance initiatives

¹¹⁶ Xenia Velez presentation to the Oversight Board (Nov. 30, 2017), 3

review and certification of the return and supporting documentation as compliant with Puerto Rico's tax laws would functionally serve as a "pre-audit," reducing the likelihood of tax evasion and the need for a fuller review by Hacienda.

- Reduce the complexity of the tax system and process of filing taxes to make it easier for individuals and businesses to pay their taxes correctly. Hacienda reports it plans to introduce pre-filled tax returns and fully digitize the tax filing system onto the Internal Revenue Unified System (SURI) platform that will enable easier filing, communication, and levying of penalties for late payment or non-payment. It must also ease the process of paying for licenses, stamps, and fees by shifting from a system of 64 agency payment centers to instead partner with retail banks, enabling taxpayers to pay their fees at any of 200 private sector locations in various communities (and within four years, 1,000 locations).
- Institute advanced analytics and broad-reach, low-touch correspondence audits. Small and medium taxpayers account for a significant share of the unpaid and underpaid taxes, but only a tiny fraction of these taxpayers receive full-scale audits due to the significant time and cost investment needed. While a traditional IRS audit costs an average of \$2,278 per case, automated notices or letters can be executed for \$52 to \$274 per case. Hacienda had begun a correspondence audit program prior to Hurricanes Irma and Maria, receiving such a strong response to the first batch of 1,000 letters that it overwhelmed the call center. This program helped contribute to \$7.1 million of collections outreach revenues in the first 2 months of FY2018 (against a \$1.4 million target), Half of those responding to the letters agreeing to pay the proposed penalty amount. Fully implementing data-driven tiered audits will enable Puerto Rico to reach a significantly larger share of nonpayers.
- **Collecting SUT on Internet sales**. Nationally, the percent of taxpayers voluntarily reporting and paying sales and use taxes on their income tax forms ranges from 0.2% to 10.2%, 120 while nearly 80% of Americans shop online. 121 The mainland already permits states to collected SUT on online sales; through legislation combining click-through nexus, affiliate nexus, and economic nexus, as well as voluntary agreements with major online retailers, the Government should be able to capture SUT on a much larger share of Internet sales. 122 In fact, Hacienda has already announced an agreement with a large online retailer to charge Puerto Rico sales tax on sales of goods. 123 With Internet sales growing at ~15% annually, Internet sales tax presents an even more important opportunity going forward.

Other best practices could be implemented as well. For example, Puerto Rico's SUT requires separate Commonwealth and municipal filings, but the filings could be consolidated and the revenue forwarded from the Commonwealth to the municipalities to ease the compliance

¹¹⁷IRS Enforcement Results, TIGTA Filing Season Audit, IRS Taxpayer Advocate, Team Analysis, GAO

¹¹⁸Hacienda, Fiscal Reforms August 2017 reporting

¹¹⁹Conversation with Hacienda, Dec 13, 2017

^{120&}quot;Use Tax Collection on Income Tax Returns in Other States" Research Department of Minnesota House of Representatives, April 2015. http://www.house.leg.state.mn.us/hrd/pubs/usetax.pdf

¹²¹ Tech Crunch, 2016

¹²²Click Through refers to a nexus between an out of state seller and the state, which enables them jurisdiction to collect taxes, created via an affiliate in the state that links to another "out-of-state" business via an affiliate program (i.e., they send sales your way, you give them a small cut of the profits). Economic nexus refers to the dollar amount spent by a consumer at a business, which provides sufficient local economic activity for the state to be able to collect taxes from that out-of-state seller. Affiliate nexus refers to out-of-state sellers with ties to local sellers, such as through parent or subsidiary arrangements, or local order fulfillment, which creates sufficient local ties to subject the out of state seller to local taxes. Voluntary agreements occur when corporations agree through individual negotiations with states to collect and remit sales tax directly to the state

¹²³ Caribbean Business, "Amazon to charge Puerto Rico sales tax"

burden. 124 Similarly, multiple monthly SUT filings (up to 4 per month for importers) could be collapsed into one-time filings. 125

The impact from these compliance related activities is projected to phase in over the course of four years given the need for training and movement of workers into Hacienda through the Single Employer Act (Law 8, 2017), establishment of new offices and processes, and gradual shift in public perception and voluntary compliance as a result of enforcement activities.

14.2.2 Right-rate other taxes and fees

Prior to Hurricane Maria, the Government reports it had already developed a plan to right-rate the following taxes and fees. These original plans, as well as any adjustments mutually agreed upon between the Government and the Oversight Board during implementation of the March 2017 Fiscal Plan, have been largely included in this 2019 Fiscal Plan, except where explicitly noted below. These plans should be implemented by FY2019.

Gaming tax. Legislation passed in 2017 that increased licenses and fees on mechanical and electronic gaming machines to \$3,000 from \$100. This was originally estimated to generate \$~71 million in incremental revenues. ¹²⁶ Part of this calculation involved assumptions of improved enforcement improvements, as the Government has previously estimated it is losing approximately \$170 million per year due to illegal machines that are not paying licensing fees. However, when factoring in the potential that a 2,900% increase in taxes on the machines could decrease total revenues from gaming—a change from 2017 forecasting—run-rate incremental revenue from the gaming tax has now been reduced to approximately \$51 million per year by FY2024.

Licenses and other fees. 2017 legislation enabled fee increases in miscellaneous categories. Hacienda will determine which exact fees are to be increased to meet these minimum thresholds, achieving an overall revenue increase of ~\$64 million by FY2024. ¹²⁷ Categories are as follows: Charges for services; Fines; Insurance; Licenses; Permits; Rent; Royalties; Stamps; Other.

Tobacco taxes. Legislation was passed in 2017 to increase specific tobacco taxes, including taxes on cigarettes, cigars, rolling tobacco, cigarette paper and tubes, chewing tobacco, snuff, electronic cigarettes, nicotine cartridges, and vaporizers. Accounting for one-time declines in use due to price-related elasticities after the new fees went into place, ¹²⁸ a ~\$57 million per year increase by FY2024 in revenues due to the new taxes is projected.

Medical marijuana tax. The Government has passed legislation to tax medical marijuana. Based on an estimated 29,000 patients, the Government can be expected to collect approximately ~\$15 million per year in additional revenue by FY2024 through this initiative. 129

Airbnb Tax. The Government has passed a law to apply a 7% hotel room tax to Airbnb rentals, resulting in a projected \sim \$4 million of annual revenue increases by FY2024, based on annualization of the actual Airbnb tax receipts from before the hurricane. ¹³⁰

126 Based on an assumption of 23,000 gaming machines on which Hacienda is able to collect fees (http://www.oslpr.org/2017-2020/leyes/pdf/ley-108-23-Ago-2017.pdf)

 $^{^{124}\}mbox{Isabel}$ Hernandez presentation to the Oversight Board (Nov 30, 2017), 13

^{125&}lt;sub>Ibid</sub>

¹²⁷ Assumes an 80% capture rate on the \$73M potential to account for potential elasticities in demand based on fee increases

¹²⁸Based on an 18% decline, per Hacienda (April 5, 2017 calculations)

^{129\$15}M projected receipts, minus \$1.5M of dedicated revenues for the medical marijuana council established in 2017-Act 42 and controlled substances monitoring in 2017-Act 70

¹³⁰ Hacienda August 2017 Revenue Scorecard, submitted Sept 15, 2017

14.3 Implementation and enforcement of revenue measures

The following implementation plan details the continuation of the Commonwealth's efforts to increase compliance and imposes further details on key milestones in the process to right-rate taxes and fees (**Exhibit 69**). To date, Hacienda has made important foundational progress toward deploying an integrated tax system, beginning with the collection of sales and use taxes, with plans to expand to other tax types. Hacienda has also initiated new compliance techniques to better leverage data and analytics, though much more can be done. On right-rating of taxes and fees, the progress has been mixed, with certain smaller revenue streams such as collection of tax on AirBnB rentals meeting initial expectations, with others like increases in tobacco taxes and gaming fees under-performing relative to expectations. Hacienda should comprehensively assess progress against these categories of revenue enhancement and develop action plans to mitigate future under-performance.

EXHIBIT 69: TAX COMPLIANCE AND FEES ENHANCEMENT KEY IMPLEMENTATION MILESTONES

Areas of focus	Action item	Deadline	
	 Finalize integrated plan for compliance improvement across major tax types, including expected value from each 	October 31, 2018	
Improve Compliance in	 Develop resource and milestone plan to support activities identified in the compliance improvement plan 	November 30, 2018	
Major Taxes (SUT, CIT, PIT)	 Launch acquisition activities (personnel, IT, external support) as needed to drive progress against key initiatives 	November 1, 2018	
	Continue monitoring performance of internet sales tax	Ongoing	
	Initiate new gaming tax license collections and report on revenue yield	April 30, 2018	
	Initiate new licenses and fees collections and report on revenue yield	June 30, 2018	
Right-Rate	Apply local taxes to Airbnb rentals and report on revenue yield	March 31, 2019	
Taxes and Fees	Continue collecting taxes on medical marijuana and report on revenue yield	Ongoing	
	Continue collecting increased tobacco taxes and report on revenue yield	Ongoing	
	Evaluate performance of added tax types; measure collections and compliance	June 1, 2022	

14.3.1 Creation of a tax expenditure report and regular reporting

As part of implementation, the Government must regularly produce a tax expenditure report, which will include a comprehensive list of revenue losses attributable to provisions of the Puerto Rican tax code that deviate from the tax structures benchmark law. Having a clear and accurate understanding of what the Government spends through tax expenditures is critical to ensuring the expenditures are contributing to economic growth and opportunity. The first draft of the tax expenditures budget must be provided to the Oversight Board by the end of calendar year 2018.

The tax expenditure report must include the cost of each tax expenditure for the current year and at least the prior two years. The report must also forecast the expected revenue collections and losses for at least the next five years from the date the report is produced. The forecast of revenue losses will include a comprehensive inventory of all tax credits, cash grants, deductions, exemptions, preferential tax rate, tax liability deferral and any other tax incentives where amounts allocated can materially impact the Commonwealth's financials.

The forecast of revenues losses should be constructed with considerations for tax benefits that are granted to large tax filers and corresponding impact on the Commonwealth's fiscal health. This report must include a year-end assessment of tax incentives granted to each intended target and a trend analysis of tax revenue collections, measured against historical and projected collections. The analysis will be used to forecast future tax expenditure budgets to ensure tax initiatives are optimized for economic growth and benefits the Commonwealth as a whole.

14.3.2 Tax incentives code reform

The current tax incentives code structure has high fiscal costs — in excess of \$400 million — but does not provide enough visibility to allow for clear tracking of these tax concessions and the returns they generate for the Puerto Rican economic growth. Past studies, based on limited economic data available, have indicated that while some tax incentives led to positive returns on investment, many others do not yield similar results.

The lack of transparency and high cost of these tax concessions warrant a reform in the tax incentives code. In addition to public disclosure of the amount and type of tax incentives awarded as part of the tax expenditure report, a value-for-money assessment for these tax concessions needs to be conducted to increase the rate of return on investment to Puerto Rico. Subsequently, based on the findings of this formalized assessment and explicit annual budget, the Government should implement a reform on the existing tax incentives code, to better align the tax concessions awards to the growth strategy of Puerto Rico.

14.3.3 Principle of Revenue Neutrality

Puerto Rico needs to drive toward more formality and increased compliance within the tax base, but it cannot lose revenues in the process. Therefore, any tax reform or tax law initiatives that the Government undertakes or pursues during a year within the 2019 Fiscal Plan period must be revenue neutral, that is, all tax reductions must be accompanied by specific offsetting revenue measures of a sufficient amount identified in the enabling legislation. Each tax measure must also include confidence building elements, such as behavioral adjustments and reasonable capture rates. To ensure revenue neutrality, the implementation of any tax law initiatives must occur sequentially, with the Government ensuring that initiatives are paid for before rates are reduced.

Enforcement mechanisms must be part of any tax initiative package to prevent a scenario where tax reductions are not accompanied by sufficient offsetting revenue measures identified in the enabling legislation.

Chapter 15. REDUCTION IN APPROPRIATIONS TO UPR AND MUNICIPALITIES

15.1 Current state and vision for Commonwealth appropriations

The central Government provides a range of appropriations to three main groups of recipients: The University of Puerto Rico, Puerto Rico's 78 municipalities, and "other" recipients (typically private industry or non-profit institutions).

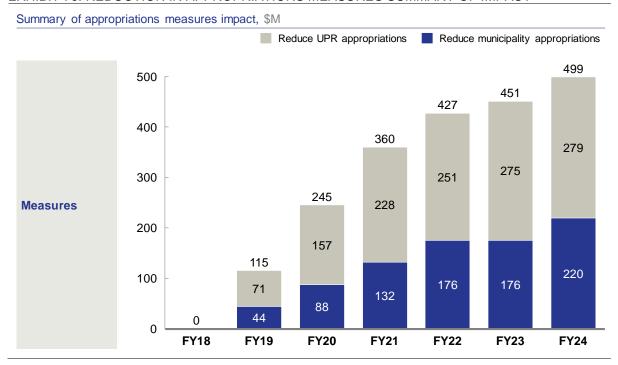
Municipalities received \$220 million in appropriations (exclusive of the one-time Municipal Recovery Fund) from the Commonwealth in FY2018, but despite this aid they operated at annual operating deficits of \$260 million. With more reductions on the horizon, municipalities must undergo substantial operating model changes, or else risk increasing their annual operating deficits substantially. In addition to reducing the appropriations to municipalities to drive fiscal discipline, the Commonwealth can support consolidations of municipal services to encourage efficiencies, such as through service provision collectives or streamlining the legal framework to remove barriers to collaboration.

¹³¹ V2A November 2016

15.2 Key initiatives to reduce appropriations

Reducing Commonwealth subsidies to municipalities and UPR will lead to run rate savings of \$499 million by FY2024 (Exhibit 70).

EXHIBIT 70: REDUCTION IN APPROPRIATIONS MEASURES SUMMARY OF IMPACT



15.2.1 Reduce UPR appropriations to levels in line with funding of other U.S. public universities

In FY2018, UPR was 67% subsidized (~\$678 million in annual appropriations) by state and local funds, compared to an average 25% state-to-local subsidization for US public universities nationally. At that time, UPR's undergraduate tuition was less than one-third of the US average for public universities even after adjusting for per-capita income and consisted of 11 independent campuses with minimal shared services or administrative consolidation.

A reduction of the appropriation for UPR was determined in 2017 through a shared process with the Government to identify reasonable, sustainable measures to bring UPR closer to US mainland public university tuition and administrative cost benchmarks, while maintaining (and in many cases improving) the performance of the system, which serves as a primary economic growth engine of the Island.

15.2.2 Establish independent scholarship fund for UPR

The April 2018 Fiscal Plan created a means-based scholarship fund for UPR, which will generate \$39 million in investment funds in FY2020, and which will be used to help build up an endowment to pay for need-based scholarships for UPR students. Specifically, the savings will fund an independent endowment for needs-based scholarships for students at UPR, which will be managed by Hacienda (OCFO).

¹³² UPR, IPEDs 2016, College Board

15.2.3 Reduce municipal appropriations & support through service consolidation and property registry / tax reform

To incentivize municipal operational changes, the Commonwealth must reduce the current level of municipal appropriations. In FY2018, the total municipal appropriation was reduced by \$150 million, bringing the new baseline appropriations to \sim \$220 million per year. Going forward from this current baseline, there must be a reduction in each successive year, holding appropriations constant at roughly 45-50% of current levels starting in FY2022 before ultimately phasing out all subsidies in FY2024.

The slow ramp in reductions will allow the remaining funds to be used to fund shared service consolidations. Two levers in particular should enable municipalities to become solvent: municipal service consolidations and institution of property tax reform.

Municipal service consolidations

Consolidating services across multiple municipalities can help reduce cost by leveraging scale, especially in areas of services provided directly to residents, including public works and infrastructure, public safety, family services, education, and housing. Prior to Hurricanes Irma and Maria, Estudios Técnicos estimated that operating expenditure reduction measures, in part from municipal service sharing, could result in a potential combined fiscal impact of \sim \$150-\$450 million. 133

The Commonwealth should pursue several initiatives to incentivize and streamline consolidation:

- Offer financial incentives (e.g., remaining municipal subsidy) for municipalities who hit targets
- Provide transparency into service performance by creating performance metrics and publishing the results, benchmarked against peer municipalities
- Develop and operate service provision collectives
- Streamline legal frameworks to remove any barriers to collaboration between municipalities (e.g., liability issues); for example, the Government can pass legislation like New Jersey's 2007 Uniform Shared Services and Consolidation Act to formalize accountability for pursuing shared services by placing the onus on local leadership¹³⁴

Property tax reform

In partnership with the Municipal Revenues Collection Center (CRIM), the municipalities should identify and register tens of thousands of non-registered properties to begin collecting tax on them, ¹³⁵ and re-categorize misclassified properties (e.g., residential properties marked as commercial). Additionally, CRIM can streamline collection activities and use proven compliance practices, such as advanced analytics to identify non- or under-payment, to raise payment rates. Based on implementation planning discussions in August 2017, CRIM estimated these initiatives could produce: ¹³⁶

- \$150 million of increased revenue from raising property tax compliance from 68% to 85%
- \$150-200 million from registering properties not on the rolls

^{133 &}quot;Estudio para evaluar la estructura municipal de Puerto Rico", Estudios Técnicos (2016)

¹³⁴New Jersey Department of Community Affairs, Shared Services – Working Together. April 2011 http://www.nj.gov/dca/divisions/dlgs/programs/shared_docs/sharedsvcsrefguide.pdf

¹³⁵Many homes in Puerto Rico have not been registered with the Government, which has led to difficulties for thousands in receiving assistance from FEMA's Individual Housing Program. For example, as of mid-January 2018, 62% of the 1.1 million applications for disaster assistance has been either rejected or were still "in-process", often due to lacking registration and title deeds ("Majority of Claimants in Puerto Rico Still Await Assistance from FEMA, Many Found 'Ineligible'", Caribbean Business)

¹³⁶ Meetings with CRIM leadership on July 19, 2017

- \$500 million of capturable back property taxes owed (from \$1.3 billion total owed)
- Lastly there is an additional, not yet sized, opportunity from reclassifying commercial properties incorrectly listed as residential and updating property valuations

Chapter 16. PENSION REFORM

16.1 Current state of and required changes to pension reform

The Government operates three public employee retirement systems in Puerto Rico: the Employees' Retirement System (ERS), the Teachers' Retirement System (TRS), and the Judicial Retirement System (JRS). The plans have different tiers of benefit formulas, some of which are traditional defined benefit pensions based upon years of service and final salary, while others are hybrid cash balance plans. Under the hybrid cash balance plans, employees have notional accounts credited with contributions and interest, and upon retirement, benefits are payable as an annuity. Different benefit tiers apply to employees based upon the year in which they were hired. Per the latest data available, each of the systems included the following liabilities: 137

- ERS: 242,000 total covered (119,000 active employees, 123,000 retirees and other beneficiaries)¹³⁸; with \$1.5 billion in annual benefits and \$31 billion in total actuarial liability
- TRS: 77,000 total covered (33,000 active employees, 44,000 retirees and other beneficiaries); with \$0.7 billion in annual benefits and \$17 billion in total actuarial liability
- JRS: 878 total covered (364 active employees, 514 retirees and other beneficiaries); with \$25 million in annual benefits and \$0.7 billion in total actuarial liability¹³⁹

All employees make contributions toward their benefits, albeit at different rates. Most regular government employees also participate in Social Security, which includes both employer and employee contributions; most teachers, judges, and police officers do not (Exhibit 71).

¹³⁷ All liability estimates are as of July 1, 2017, and benefit estimates are for FY2018, but based on census data as of July 1, 2016

¹³⁸ Counts do not include participants who are terminated and owed a deferred vested benefit as this participant data is unavailable. The liability for these participants is estimated via a load in the actuarial liability.

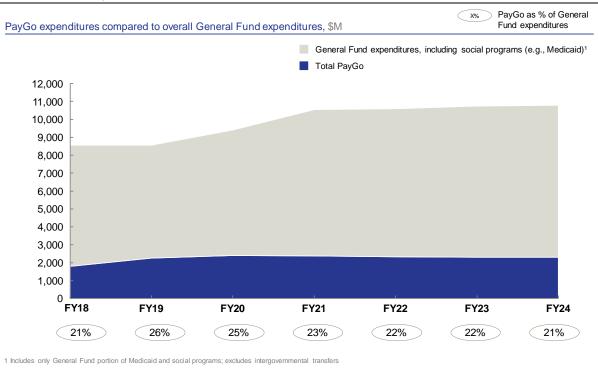
¹³⁹ The total actuarial liability is approximately \$622 million as described in the following: www.retiro.pr.gov/wp-content/uploads/PRJRS_Val_June302017.pdf

EXHIBIT 71: PUBLIC EMPLOYEE RETIREMENT SYSTEMS OVERVIEW

Group	Defined Benefit Component	Hybrid Cash Balance Component	Social Security Coverage
ERS - Hired Jan 1, 2000 or later	None	Based on employee contribution and a share of investment earnings	Police – No Others – Yes
ERS - Hired before 2000	Based on years of service and salary, frozen as of 2013	Based on employee contribution since 2013 and a share of investment earnings	Police – No Others – Yes
TRS - Hired Aug 1, 2014 or later	None	Based on employee contribution and a share of investment earnings	No
TRS – Hired before Aug, 2014	Based on salary and years of service	None	No
JRS - Hired July 1, 2014 or later	Reduced formula based on salary and years of service	Based on employee contribution and a share of investment earnings	No
JRS — Hired before July 1, 2014	Based on salary and years of service	None	No

Over many decades, successive governments have failed to adequately fund these retirement plans, and today the ERS, TRS and JRS are nearly insolvent. In fact, PayGo expenditures to provide pension benefits are expected to constitute approximately 1/5 of General Fund expenditures without further action, as detailed below (Exhibit 72).

EXHIBIT 72: PAYGO EXPENDITURES COMPARED TO OVERALL GENERAL FUND EXPENDITURES, PRE-MEASURES



These retirement plans have depleted the assets that were set aside to pay benefits. Further, the employer contributions were not transferred as anticipated. Satisfying pension commitments to current retirees and future retirees and their families is not only important to these individuals but also important to Puerto Rico's economy as retirees spend virtually all their income on the Island. Action must be taken to identify a level of benefits that Puerto Rico can afford and devise a plan for the Government to fund these revised benefits.

The Commonwealth has already taken critical steps toward a more stable pension system through legislation that passed from 2013 through 2017 which ceased accruals under the unsustainable ERS and TRS defined benefit (DB) plans (though TRS reform was partially overturned). In addition, the Commonwealth transitioned to a new "PayGo" pension system, liquidated assets to help fund benefits owed, and has moved the assets of recently hired TRS members into segregated accounts and is in the development stage of implementing true defined contribution (DC) retirement plans. However, there is a need for further action to ensure the long-term adequate funding of the pensions benefits; in addition, some of the current commitments have not yet been fulfilled (e.g., the transition to the new defined contribution system has not yet been completed).

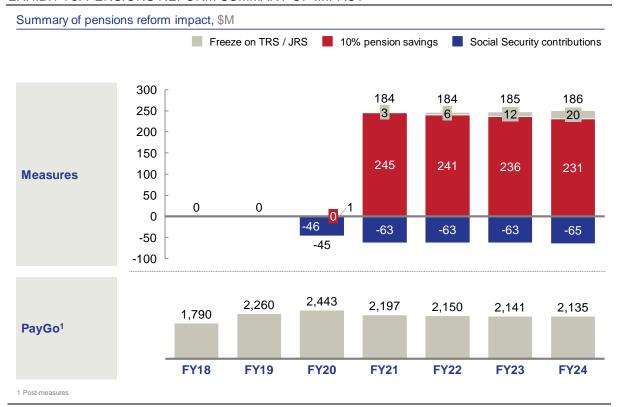
Puerto Rico's retirement systems must be further reformed to reduce costs and maintain adequate funding for current and future retirees. The restructuring will have an average of approximately \$180 million annual impact through FY2023, once implemented. Reductions to benefits must also be structured to **protect lower-income retirees**, who otherwise could become impoverished and therefore be forced to rely upon government "safety net" benefits.

Pension reform will help restore both fiscal balance and a promise for current and future retirees to safeguard their assets and their future pensions.

16.2 Proposed pension reform initiatives

Restructuring and adequately funding the pension system must lead to \$694 million in savings from FY2019 to FY2024, as shown below (**Exhibit 73**).

EXHIBIT 73: PENSIONS REFORM SUMMARY OF IMPACT



16.2.1 Freeze DB accumulation for JRS/TRS and enroll employees in a DC plan with segregated accounts

TRS members hired prior to August 1, 2014 and JRS members hired prior to July 1, 2014 are currently accruing benefits under their defined benefit retirement plans. ERS members have already transitioned to hybrid cash balance plans (in 2000 and 2013), with a transition to DC accounts targeted for July 2019. To avoid creating future pension liabilities and to adequately fund the pensions of both taxpayers and future retirees, the JRS and TRS plans' benefit accrual must be frozen by January 1, 2020. Members will retain the benefits they have accrued to date, subject to the benefit reduction formula discussed below. Future benefits must be based on contributions and earnings in new defined contribution retirement accounts. This will result in consistent treatment across ERS, TRS, and JRS, where all employees will contribute to segregated DC accounts. Going forward, employees should have the certainty that their contributions and investment returns will be safeguarded for the future through managing their own segregated accounts.

Although in the early years the DB freeze savings are small (\$1.3 million in FY2020), over time the freeze should produce significant savings (almost \$42 million in FY2026 and growing further in later years to \sim \$300 million) which will play a significant role in restoring long-term adequate funding. The freeze will be implemented through the Plan of Adjustment, and is slated to take effect during FY2020 so that needed changes can be implemented.

The Fiscal Plan reflects freeze provisions comparable to the ERS freeze that was implemented in 2013, with the following key aspects:

¹⁴⁰Estimate provided by AAFAF in February 2018

- Individuals within 6 months of service as of the freeze of reaching 30-year enhanced service benefits will be granted 6 months to grow into a modified enhanced 30-year benefit. Otherwise:
 - Individuals that have yet to vest in a benefit amount will be allowed the
 opportunity to earn additional service towards vesting after the freeze; the
 benefit upon vesting will be calculated based on service as of the freeze date,
 with prorations of the full 10-year benefit based on years of service less than 10
 years for judges with shorter tenures;
 - Retirement eligibility will be delayed up to 3-years for those not yet eligible for retirement as of the freeze date;
- Future Cost of Living Adjustments (COLAs) will be eliminated;
- Minimum benefits and bonuses will be eliminated for future retirements; The ability to purchase additional years of service will be eliminated; and
- Future terminations due to disability will be entitled to the same benefits as regular terminations.

16.2.2 10% pension benefit reduction

Expenditures are being reduced throughout the Commonwealth's budget and contractual debt service remains unaffordable. Retirement plan participants, like other unsecured claimholders, face a reduction in the amounts paid to them by the Commonwealth. A 10% average reduction in pensions is appropriate and necessary. The goal is a balanced approach to restore fiscal health to Puerto Rico while ensuring that cuts to retirement benefits occur in a progressive manner that protects any retirees from falling into poverty. The level of cuts to pension benefits is also in line with reductions in other government systems facing pension funding crises. ¹⁴¹

Although the average benefit reduction will be 10%, there will be no reduction for those with total retirement plan benefits (including assumed Social Security of \$400 for non-police ERS members for whom the employer pays Social Security taxes) below the poverty level of \$1,000 per month. This formula is equivalent to giving each beneficiary a reduction of 25% in the monthly benefits they receive in excess of \$600 or \$1,000. These dollar figures will be adjusted in future years consistent with increases in the federal poverty threshold.

Under this approach, about 36% of retirees would receive no reduction in their benefits and an additional 22% of retirees will experience a benefit reduction of 5% or less. Therefore, in total, approximately 80% of retirees will experience a benefit reduction of 10% or less, and over 90% of retirees will experience a benefit reduction of 15% or less. Very few retirees will have more than a 20% reduction, and none will have a reduction of 25% or more. For 2019 Fiscal Plan entities only, the effect of the reform would be 33% of retirees with no reduction, and 24% with <5% reduction (Exhibit 74).

This formula will also apply to benefits earned by current employees who have yet to retire.

¹⁴¹ For example, in Detroit and Rhode Island, pension cuts ranged from 0-30% across beneficiary categories

¹⁴² Actuarial calculation show that the following approach will result in reductions averaging 10%:

[■]Determine the average monthly pension by adding the regular monthly pension amount, the special law pension, the healthcare bonus, and one-twelfth of the Christmas Bonus and Medicine Bonus;

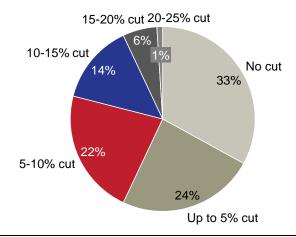
[■]Reduce these monthly benefits by 25%; and

[■]Add back up to \$150 per month (\$250 per month for those who are not covered by Social Security) to reduce the effect of benefit reductions for those with the lowest benefits

¹⁴³ Reduction (not less than zero) = 25% x Benefit minus 25% x (1,000 if Police/TRS/JRS or \$600 if ERS non-Police). For example, if ERS benefit (in Social Security) is \$2,000, then reduction = 25% x 2,000 - 25% x \$600 = \$500 - \$150 = \$350. Actual Social Security benefits will not be considered. The calculation simply uses \$600 for ERS members other than police and \$1,000 for all others.

EXHIBIT 74: DISTRIBUTION OF BENEFIT REDUCTION

Distribution of benefit reduction for 2019 Fiscal Plan entities. % of retirees



The 10% reduction shall take effect starting in FY2020 to have sufficient time to implement it following the Plan's enactment.

Because the poverty threshold is anticipated to increase faster than frozen pension benefits and the size of the frozen benefits will decline as the number of years accrued before the freeze decreases (when the youngest workers who still had DB plans begin to retire), the 10% target overall savings rate will fall over time, eventually reaching less than 1% by about 2050.

16.2.3 Covering more government workers in Social Security

Currently, teachers, police officers, and judges do not participate in Social Security. They do not pay into the program, nor does the Government make a Social Security contribution on their behalf. Unlike other ERS members, teachers, police officers, and judges are entirely reliant on their government pensions for income in retirement. This places them at risk when government retirement plans are poorly funded.

These groups are exempt from Social Security because of the "Section 218" agreement between the Commonwealth and the Social Security Administration, which stipulates that government employees may be exempt from Social Security if they participate in a "comparable" retirement plan such as one which includes total employee and employer contributions equal to at least 7.5% of employee wages.

Covering these workers under Social Security will provide them with diversified sources of income in retirement, and Social Security's progressive benefit formula will provide a stronger safety net for lower-paid employees. Workers will typically earn greater retirement benefits under Social Security based on a 6.2% employee contribution and a 6.2% employer (government) match, than they would in a DC plan funded only with a 6.2% contribution. For example, a typical full-career government employee retiring with a salary of \$35,000 will be entitled to a Social Security benefit of approximately \$16,000, in addition to the benefit the employee builds in their defined contribution retirement account.

Social security retirement benefits are only provided for those that have ten years of covered earnings. Therefore, it would not be worthwhile for older workers who may not meet the tenyear threshold and do not have other employment in which they were covered by Social Security to be covered under social security. For this reason, teachers and judges *under the age of 45* shall be covered under Social Security, while all police shall be covered under Social Security. This can be accomplished without either an employee referendum or new federal legislation by reducing pension contributions for teachers and judges under the age of 45 and

all police to an amount lower than the 7.5% required by Section 218. This step will trigger mandatory enrollment in Social Security. Concurrently, lowering the pension contribution for younger workers will address the loss of take-home pay they would suffer by having to pay the 6.2% Social Security payroll tax.

The 2019 Fiscal Plan includes the enrollment of all police in Social Security beginning in July 1, 2019; however, this requires the Government to first timely implement certain changes to police pension programs. The 2019 Fiscal Plan includes the enrollment of teachers and judges under the age of 45 in Social Security as of January 1, 2020, coincident with the plan freeze.

At a further date, the Commonwealth may wish to take the necessary steps to provide the option for teachers and judges over the age of 45 to be covered under social security. 144

16.3 Implementation and enforcement of pensions measures

Advance work will be necessary to prepare the systems for the JRS / TRS freeze and pensions reductions, as well as ensuring communications with all Puerto Rican pension recipients (**Exhibit 75**). The October 2018 Certified Fiscal Plan initially assumed an implementation date of July 1, 2019. However, the 2019 Fiscal Plan reflects delays as a result of an updated implementation timeline.

EXHIBIT 75: PENSIONS REFORM KEY IMPLEMENTATION MILESTONES

Areas of focus	Action item	Deadline
Shift to Defined	Transition hybrid accounts to segregated DC accounts	July 1, 2019
Contribution Accounts	Implement JRS / TRS freeze and transition to segregated DC accounts	January 1, 2020
Reduction in Pension Benefits	Implement 10% average pension reduction	July 1, 2020
	Pass legislation for enrollment of all police, including new hires, in Social Security	June 30, 2019
	Enroll all police, including all new hires, in Social Security	July 1, 2019
Social Security	 Pass legislation for enrollment of teachers and judges under 45, as well as all new hires, in Social Security 	September 30, 2019
	Enroll teachers and judges under 45, as well as all new hires, in Social Security	January 1, 2020

Chapter 17. ENSURING SUCCESSFUL IMPLEMENTATION AND FISCAL CONTROLS

Historically, the Government has suffered from inconsistent execution due in part to not having a defined, centralized project management structure. It has historically operated in silos, suffered staffing and coordination challenges, and has been limited by weak controls and outdated technology that prevents it from being able to report and keep track of expenditures. To mitigate implementation risk and improve fiscal management, the Oversight Board expects there to be a robust and well-resourced PMO structure, clear implementation plans with milestones and key progress indicators, and regular reporting on fiscal measures and controls. These functions will largely be the responsibility of the Office of the CFO.

¹⁴⁴ This would require federal legislation, extensive communications, and a Section 218 divided vote referendum.

17.1 Implementation architecture

Developing a centrally-run PMO is an important step toward ensuring the implementation and tracking of the core operational transformation and agency efficiency measures that will achieve savings targets under the 2019 Fiscal Plan. The OCFO is the central PMO with defined reporting to the Governor of all economic and transformation measures. It is comprised of senior leadership, oversees Agency PMOs, and reports directly to the Governor's appointed Fiscal Economic Working Group (FEWG). At the time of writing, the OCFO PMO and the FEWG have already been established and are in the implementation phase.

Individual Agency PMOs should be established with direct reporting to the OCFO. Each agency head shall be responsible for developing and implementing a PMO structure that best fits their respective agency while still meeting their agency grouping savings targets. Through this PMO structure, the Government is positioned to effectively manage and implement the 2019 Fiscal Plan. As such:

- The Agency PMOs should be led by designated Agency Heads and report directly to the OCFO
- Agency PMOs should undertake the required work to implement initiatives
- The daily activities of PMOs should be managed and undertaken by staff knowledgeable in the relevant subject matter areas, and assigned members will meet regularly with PMO leadership to report on progress and facilitate necessary decision-making
- Agency PMOs shall be responsible for assembling a taskforce to: complete validation and definition of full scope of projects and priorities; finalize reporting tools and tracking responsibilities; and perform ongoing weekly tracking and reporting.

The PMOs should ensure continued implementation progress through robust tracking and reporting tools that foster growth in transparency and ownership, including:

- **Project charters** that establish the goals and structures of measures, identify risks and obstacles, and establish metrics and KPIs
- Implementation plans with detailed layouts of each activity required for accomplishing sub-measures, risks / mitigants for each activity, clear leaders and owners for each activity, and metrics and KPIs. These should include a "live" calendar of updates and status of each measure. If an activity goes behind schedule, the workplan will reflect that the activity is still in progress.
- Implementation dashboard / tracker that provides a single snapshot of the entire transformation plan; and allows management to know the status of each initiative in a distinct status: Complete; In Progress; Delays; Major Issues. This tracker will allow the Oversight Board to monitor progress and ensure enforcement of measures and reforms.
- **Sub-measure dashboards** that provide "zoomed in" views of a specific sub-measure, display progress with details / commentary on project status, include agreed upon milestones / dates to track progress, and provide mitigation plans
- Implementation monthly reports that provide a more detailed perspective on progress including a number of key reporting elements: a) headcount by regular and transitory with more details in specific agency cases, b) budget to actuals by cost category and concept, c) milestones progress, d) KPIs/leading indicators, e) achieved savings to date. These reports provide important codification of progress as well as context for monthly meetings where agencies, OCFO and Oversight Board representatives can hold meaningful discussions on progress, items at risk and ongoing mitigating activities

17.2 Oversight Board and OCFO implementation collaboration

The Oversight Board has played and will play an active role in overseeing all aspects of the 2019 Fiscal Plan. OCFO must provide the Oversight Board and its staff the information needed to effectively track status of key initiatives included in the 2019 Fiscal Plan, which is necessary to measure overall progress against the fiscal and budget objectives outlined in the 2019 Fiscal Plan.

For example, OCFO will provide Oversight Board staff with key management artifacts on a timely basis, including:

- Implementation plans submitted by individual PMOs
- Progress reviews (including milestones and metrics) against key structural and fiscal measures
- Review of key implementation risks, including assessment of likelihood of realization, potential impact, and potential mitigations
- Monthly progress reports submitted by individual PMOs

17.3 Ensuring reporting on 2019 Fiscal Plan reforms

The fiscal and structural reforms described in the 2019 Fiscal Plan represent a significant and transformative effort across the Government. As such, there are strict reporting requirements needed to ensure savings and growth targets are being achieved on time, and to identify any major risks to reform in order to course correct at an early stage.

To date, however, the Government has struggled with implementing reforms and reporting on this implementation in timely manner. For example, the April 2018 Fiscal Plan required that implementation plans be submitted for all major reforms by June 30, 2018. The Government did not submit many implementation plans until September 2018 – and took as long as April 2019 to submit some. Progress has as a result been inconsistent and incomplete, and many agencies appear unprepared to meet FY2020 savings targets. While some progress on measures has been made, many reforms are delayed or not occurring. In cases where certain reforms will not occur, the Government must find these savings through other means.

The Government shall produce monthly performance reports, which shall be submitted to the Oversight Board on the 15th of each month, demonstrating the progress made on all key reform areas. Agency efficiency savings that have been realized should be broken down by grouping and agency across payroll and non-payroll savings (as well as on an object level where needed) and display the performance of the realized agency efficiency savings for each agency against the projections as set forth herein. Reporting shall also include detail on use of funds for professional services, as well as within the "englobadas" cost concept, such that these expenses can be appropriately managed. To date, only ~50% of agency groupings have consistently provided implementation reporting. The Government must improve reporting such that it and the Oversight Board can hold agencies accountable for achieving savings.

If, after any fiscal quarter the projected agency efficiency savings for any grouping is not realized, the shortfall from that fiscal quarter will be added to the agency efficiency savings target for the corresponding grouping for the following quarter.

If, based on the quarterly performance reports and any other information the Oversight Board deems appropriate, the Oversight Board concludes there is underperformance in agency efficiency savings for any grouping, **the Oversight Board will take measures to enforce reductions in the amount of unrealized savings** in the following fiscal quarter for the

corresponding grouping, reserving all rights under PROMESA, including but not limited to those under Section 201(e), Section 202(b), and Section 202(e), to do so.

As needed, the Oversight Board will hold public hearings to review implementation progress.

17.4 Ensuring fiscal controls and transparency

As part of the April 2018 Certified Fiscal Plan, the Oversight Board has required public reporting of the Government's data regarding finances and budget to improve fiscal governance, accountability, and internal controls. Further, to ensure that there is transparency into the Government's progress toward meeting its savings targets, the Government is expected to meet the following milestones. (**Exhibit 76**)

EXHIBIT 76: FISCAL CONTROLS AND REPORTING KEY IMPLEMENTATION MILESTONES

	Reporting Requirement	Closing of the 1st Reporting Period	Cadence for FOMB Reporting ^A	Cadence for Public Reporting ^B	Reporting Requireme Source
	A. Treasury Single Account (TSA) Liquidity (Actuals vs. Liquidity Plan)	10/26/2018	Weekly; Monthly	Weekly, Monthly	Fiscal Plan
	B. Consolidated TSA including Agency Detail (Actuals vs. Liquidity Plan)	10/31/2018	Monthly	Monthly	Fiscal Plan
Cash	C. Independently Forecasted Component Units (IFCUs) (Actuals vs. Liquidity Plan)	10/31/2018	Monthly	Monthly	Fiscal Plan
Reporting	D. Liquidity - Office of the Comptroller, Senate, House of Representatives, Judiciary Branch, Civil Rights Commission, OMBUDSMAN (Actuals vs. Liquidity Plan)	10/31/2018	Monthly	Monthly (beginning 11/30/18)	Fiscal Plan
	E. Summary of Bank Account for the Government of Puerto Rico and its Instrumentalities	10/31/2018	Monthly	Monthly	Fiscal Pla
	Monthly Budget to Actual Report - Including Revenues (including gross revenues, tax credits collected, and net revenues) ¹		,	,	
	1. General Fund	10/31/2018	Monthly	Monthly	Fiscal Pla
	Non-General Fund Funds (including Special Revenue Funds) ²⁻³	10/31/2018	Monthly	Monthly (beginning 1/31/19)	Fiscal Pla
	3. Federal Funds ⁴	10/31/2018			Fiscal Pla
			Monthly	Monthly (beginning 1/31/19)	
	4. IFCUs	10/31/2018	Monthly	Monthly (beginning 1/31/19)	Fiscal Pla
	5. Comptroller, Senate, House of Representatives, Judiciary, Civil Rights Commission, OMBUDSMAN	10/31/2018	Monthly	Monthly (beginning 11/30/18)	Fiscal Pla
	B. Central Government Payroll and Headcount ⁵	10/31/2018	Monthly	Monthly	Fiscal Pla
dditional	C. IFCU Payroll and Headcount ⁵	10/31/2018	Monthly	Monthly	Fiscal Pla
ctuals	D. Central Government 3rd Party Accounts Payable	10/26/2018	Weekly, Monthly	Weekly, Monthly	Fiscal Pla
eporting	E. Central Government Invoice Processing KPIs	10/31/2018	Monthly	Monthly (beginning 11/30/18)	Fiscal Pla
	F. Tax Credits		-		Fiscal Pla
	1. Liability	12/31/2018	Quarterly	Quarterly (beginning 1/31/19) ^C	Fiscal Pla
	2. New credits granted	10/31/2018	Monthly	Monthly (beginning 1/31/19) C	Fiscal Pla
	3. Credits used (direct impact on collections)	12/31/2018	Monthly	Monthly ^C	Fiscal Pla
	Tax Expenditure Report	12/31/2018	Yearly	Yearly	Fiscal Pla
	G. OATRH Attendance for the Preceding 4-Week Period	12/31/2018	Monthly	Monthly	Fiscal Pla
	H. Quarterly budget to actual revenues, expenditures, and cash flows, together with a variance analysis, of the territorial	10/31/2018	Quarterly	Quarterly	Fiscal Pla
	government during the preceding quarter	10/31/2010	Gual torry	and tony	i ioudi Pli
	A. Structural Reforms (4)				
	1. Labor Reform	10/31/2018	Monthly	Quarterly	Fiscal Pla
	2. Ease of Doing Business Reform	10/31/2018	Monthly	Quarterly	Fiscal Pla
	2. Ease of Doing Business Reform 3. Energy Reform	10/31/2018	Monthly	Quarterly	Fiscal Pla
	4. Infrastructure Reform	10/31/2018	Monthly	Quarterly	Fiscal Pla
		10/31/2016	ivioritrily	Quarterry	FISCAI PI
	B. Fiscal Measures (4)				
	Office of the Chief Financial Officer	10/31/2018	Monthly	Quarterly	Fiscal Pla
	2. Revenue Measures	10/31/2018	Monthly	Quarterly	Fiscal Pla
	3. Pension Reform	10/31/2018	Monthly	Quarterly	Fiscal Pla
	4. Healthcare Reform	10/31/2018	Monthly	Quarterly	Fiscal Pla
	C. Agency Efficiencies				
	1. Agriculture	10/31/2018	Monthly	Quarterly	Fiscal Pla
	2. Corrections	10/31/2018	Monthly	Quarterly	Fiscal Pla
	3. Culture	10/31/2018	Monthly	Quarterly	Fiscal Pla
Measures nd Reforms	4. Economic Development	10/31/2018	Monthly	Quarterly	Fiscal Pla
eporting	5. Environmental	10/31/2018	Monthly	Quarterly	Fiscal Pla
rogress	6. Executive Offices	10/31/2018	Monthly	Quarterly	Fiscal Pla
eports) 6, 7	7. Finance Commission	10/31/2018	Monthly	Quarterly	Fiscal Pla
	8. Office of the CFO	10/31/2018	Monthly	Quarterly	Fiscal Pla
	9. Healthcare	10/31/2018	Monthly	Quarterly	Fiscal Pla
	10. Justice	10/31/2018	Monthly	Quarterly	Fiscal Pla
	11. Labor	10/31/2018	Monthly	Quarterly	Fiscal Pla
	12. Land	10/31/2018	Monthly	Quarterly	Fiscal Pla
	13. Ombudsman	10/31/2018	Monthly	Quarterly	Fiscal Pla
	14. Public Safety	10/31/2018	Monthly	Quarterly	Fiscal Pla
	15. Public Works	10/31/2018	Monthly	Quarterly	Fiscal Pl
	16. Social Welfare	10/31/2018	Monthly	Quarterly	Fiscal Pla
	17. State	10/31/2018	Monthly	Quarterly	Fiscal Pla
	18. Universities	10/31/2018	Monthly	Quarterly	Fiscal Pla
	19. Utilities Commission	10/31/2018	Monthly	Quarterly	Fiscal Pla
	20. Independent Agencies	10/31/2018	Monthly	Quarterly	Fiscal Pla
Macro- conomic dicators	Macroeconomic Indicators	12/31/2018	Quarterly	Quarterly	Fiscal Pla
	Uses/Disbursement Related to Hurricane Assistance (PWs)	10/31/2018	Monthly	n/a	Fiscal Pla
ecovery unding	B. Department of Housing	10/31/2018	Monthly	n/a	Fiscal Pla
eporting	C. Highways and Transportation Authority	10/31/2018	Monthly	n/a	Fiscal Pla
	D. TSA Vendor Disbursements	10/31/2018	Monthly	n/a	Fiscal Pla
ayGo eceivables d Contri- utions eporting	PayGo Receivables and Contributions Reporting	10/31/2018	Monthly	Monthly	Fiscal Pla
	A. Quarterly revenue forecast update	10/31/2018	45 days after end of every quarter	n/a	Budget
	Certify that no appropriation of any previous fiscal year (except for appropriations covered by the exceptions authorized in the budget) has been used to cover any expense during the prior fiscal quarter	12/31/2018	15 days after end of every quarter	n/a	Budget
Certifica-	in the budget) has been used to cover any expense ouring the prior liscal quarter C. Certify that no amount of the (i) Social Security Reserve or (ii) Emergency Reserve has been used to cover any expenses during the prior fiscal quarter	12/31/2018	15 days after end of	n/a	Budget
III. Certifica- tions and Others		12/31/2018	every quarter	n/a	Fierd P
			Monthly 7 days after a bill is	n/a n/a	Fiscal Pla
hers	E. Signed legislation Compliance Certificates	n/a	sig-ned by the	Iva	
hers	E. Signed legislation Compliance Certificates F. Sabana file submission	n/a n/a		n/a	Budget

¹ Revenues must include gross revenues received, less tax refunds; SRF revenues must be included.
2 The following fund types are including in non-GF reporting: (f) FEE (Fondos Especial es Estatales or Special State Funds) — This fund type should only include revenue designated by specific laws; (2) OI (Otros Ingresso or Other Income) - This fund type should only include revenue destanced in on-recurring revenue with specific expenses it do to it. No recurring income should be included or recognized under this fund type OI; and (3) IP (Ingresso Propios or Own Income) - This fund type should only include revenue generated by the agencies or public corporation through their services.
3 The morthly deliverable must include: (1) All revenues and expenses for the current Fy; (2) The cash balance.
4 The morthly deliverable must include all std all Awards by Agency, additionally, next to each Award plesse include: (1) Date Award was granted; (2) Date Award express/renews; (3) Total Award expenses from prior fiscal years (split into payroll/non-personnel); (6) Total Award expenses for the current fiscal year (split into payroll/non-personnel); and (6) Total remaining Award amount (split into payroll/non-personnel).

personnel): (4) Total Award expenses from prior fiscal years (split into payroll/non-personnel); (b) Total Award expenses in the control payroll/non-personnel).

5 The report must include (1) the fund type; (2) overtime amounts; and (3) the breakdown of benefits.
6 Implementation plans must be provided for each agency under each agency grouping; the full list of the agencies is included in the Appendix of the Fiscal Plan.
7 Reporting must include:
(a) Morthly nonitoring by each government agency of key performance indicators for each of the fiscal reform measures.
(b) Morthly self reported realized savings achieved year to date by agency and agency groupings.
(c) Implementation deshboard.

A Unless otherwise specified, monthly reporting to the Oversight Board must be received 15 days after the end of a reporting period.

B Unless otherwise specified, public reporting must be published 30 days after the end of a reporting period.

C Report shall be structured in a way that allows for the confidentiality of the agreements to be maintained, but the overall (summarized) numbers and trends to be available to the public.

In addition to meeting the above milestones, the Government must proceed according to the following budgetary requirements:

- The Department of the Treasury will remit to the Legislative Branch and its components, to the Judiciary, to the University of Puerto Rico, and to the non-profit entities that receive funds from the General Fund, monthly and in advance, the budgetary allotments corresponding to one twelfth of the annual allocation provided in the budget resolution for each entity. Such one-twelfth monthly allocation to each entity (except with respect to the Judiciary) shall be subject to the two and half percent (2.5%) withholding during the first three quarters of each fiscal year.
- The Director of OMB may authorize the encumbrance and disbursement of up to ninety-seven and a half percent (97.5%) of each appropriation during the first three quarters of a fiscal year. The Department of Public Safety, the Health grouping and Paygo shall be excluded from this requirement. The Director of OMB shall withhold the remaining two and a half percent (2.5%) of each appropriation until after the end of the third quarter of a fiscal year. Such withheld percentage of each appropriation shall only be encumbered and disbursed during the fourth quarter of the fiscal year if the first 8 months of actual revenues reported to the Oversight Board reach the Government's monthly revenue projections for that period and subject to the prior approval of the Director of OMB. If actual revenues for the first 8 months of the fiscal year fail to reach the Government's monthly revenue projections for that period, the amount of the withheld percentage of each appropriation that may be encumbered and disbursed shall be reduced proportionally according to the negative budget variance between projected and actual revenues.
- No later than 45 days after the closing of each quarter of a fiscal year, the Secretary of Treasury shall revise the projected net revenues of the General Fund for the current fiscal year (the "Quarterly Revision") and notify the revision to the Director of the OMB, the Governor and the Oversight Board. The Quarterly Revision shall project future revenues based on actual revenues, and include revisions to the assumptions used to generate the General Fund's net revenue projections.
- All appropriations authorized in any prior fiscal year, including appropriations without a specific fiscal year, are eliminated and no disbursement of public funds may be covered by such appropriations, except: (1) appropriations without a specific fiscal year to carry out permanent improvements that have been accounted for and kept on the books; (2) the portion of the appropriations authorized for a specific fiscal year that have been encumbered on or before June 30 of such fiscal year, which shall be kept in the books for 60 days after the termination of that fiscal year and after those 60 days no amount shall be drawn against such portion for any reason; (3) the unused amount of the \$130 million emergency reserve appropriation required by the Fiscal Plan; (4) the unused amount of the FY2019 \$190 million Public Assistance Federal Fund Matching appropriation and any such appropriations starting with the FY2020 budget; and (5) the FY2019 unused amount of the \$35 million UPR Scholarships Fund appropriation held under the custody of the Department of Treasury. In addition, this restriction on the use of appropriations of prior fiscal years shall not apply to: (1) programs financed in whole or in part with federal funds; or (2) orders by the United States district court with jurisdiction over all matters under Title III of PROMESA.
- Any power of OMB, AAFAF, or the Department of the Treasury, including the authorities granted under Act 230-1974, as amended, known as the "Puerto Rico Government Accounting Act" ("Act 230"), to authorize the reprogramming or extension of appropriations of prior fiscal years is hereby suspended. Notwithstanding this section, the appropriations approved in the budget certified by the Oversight Board may be modified or reprogrammed with the approval of the Oversight Board.

- The Executive Director of AAFAF and the Director of the OMB will certify to the Oversight Board by September 30 of each fiscal year that no appropriation of any previous fiscal year (except for appropriations covered by the exceptions authorized in the fiscal plan or budget) has been used to cover any expense.
- The emergency reserve and the unallocated capital expenditures under the custody of OMB required by the 2019 Fiscal Plan may not be used to cover any allocation or expense whatsoever without the approval of the Oversight Board.
- Any expenditure funded from a special revenue fund ("SRF") cannot exceed the lower of (1) the amount included in the certified budget for such concept of expenditure by the corresponding government entity (2) the amount actually collected and available in the corresponding SRF.
- In conjunction with the reports that the Governor must submit to the Oversight Board not later than 15 days after the last day of each quarter of the fiscal year according to Section 203 of PROMESA, the Executive Director of AAFAF and the Director of OMB will certify to the Oversight Board that no amount of the (i) Emergency Reserve and (ii) the unallocated capital expenditures under the custody of OMB has been used unless the corresponding conditions described in above have been satisfied.
- As a rule, necessary for the responsible disbursement of budgetary allocations for operating and other expenses, OMB shall withhold from any of the allocations to the agencies of the Executive Branch the amounts necessary to pay for the pay-go contribution, unemployment insurance, or taxes withheld from their employees, when OMB determines that such a withholding is necessary to ensure compliance with these obligations by the agencies concerned. Any such amounts withheld by OMB shall solely be reprogrammed to pay the corresponding outstanding obligations related to PayGo contributions, unemployment insurance, or taxes withheld from employees.
- The Office of Management and Budget and the Department of the Treasury are authorized to establish the necessary mechanisms to ensure that when implementing the concept of mobility, pursuant to the provisions of Law 8-2017, as amended, known as the "Puerto Rico Human Resources Management and Transformation in the Government Act," the corresponding transfer of funds allocated to payroll and related costs of said employee are to be carried out simultaneously.
- The Secretary of Treasury, the Director of the OMB, and the Treasurer and Executive Director of each agency or Public Corporation covered by the 2019 Fiscal Plan shall be responsible for not spending or encumbering during a fiscal year any amount that exceeds the appropriations authorized for such year. The Executive Director of AAFAF and the Director of the OMB shall certify to the Oversight Board compliance with this limitation by September 30 of each year with respect to the immediately preceding fiscal year. This prohibition applies to every appropriation set forth in a budget certified by the Oversight Board, including appropriations for payroll and related costs.
- For the avoidance of doubt, any reference within the budget to AAFAF, the Department of Treasury, or OMB, or any of their respective officers, shall apply to any successor thereof.
- On or before July 31 of each year, the Governor shall provide to the Oversight Board budget projections of revenues and expenditures for each quarter of a fiscal year, which must be consistent with the corresponding budget certified by the Oversight Board (the "Quarterly Budget"). The Quarterly Budget shall be provided to the Oversight Board in Excel format and include detailed allocations by agency, public corporation, fund type and concept of spend. Together with the report that the Governor must provide under Section 203 of PROMESA not later than 15 days after the last day of each quarter, the Governor shall provide a quarterly variance analysis that is consistent with modified accrual accounting.

- If during the fiscal year the government fails to comply with the liquidity and budgetary savings measures required by this 2019 Fiscal Plan, the Oversight Board may take all necessary corrective action, including the measures provided in PROMESA Sections 203 and 204.
- In order to ensure agencies remain compliant with the 2019 Fiscal Plan, the Oversight Board has enacted a policy to review contracts in excess of \$10M. The objective of these reviews is to determine the extent to which the contract are in compliance with the applicable fiscal plan(s).

PART V. Conclusion

The 2019 Fiscal Plan is the result of many months of work-sessions, dialogue, stakeholder engagement, research, and in-depth analysis. Across these activities, the Oversight Board and the Commonwealth Government collaborated to create a deep and rich fact base to underpin their work, and remained focused on creating an integrated approach to restoring fiscal sustainability and economic opportunity for future generations of Puerto Ricans. The starting point for this plan involved numerous structural inhibitors to growth, over \$120 billion in outstanding debt and unfunded pension obligations, and the devastating impact from a historically destructive natural disaster.

Yet in the aftermath of Hurricane Maria, Puerto Rico now has a unique economic growth opportunity. Reconstruction activity will provide economic buoyancy in the short term. PROMESA and Title III provide a temporary stay on Puerto Rico's unsustainable debt service. The 2019 Fiscal Plan lays out a series of practical, proven growth-inducing structural reforms and investments, with a responsible set of fiscal measures to right-size Government to the appropriate level.

But the next step – implementation of the reforms and measures – will always be the most critical one. Unfortunately, since the October 2018 Fiscal Plan, the Government's implementation of structural reforms and fiscal measures has been slow and incomplete. Moreover, the failure to pass the comprehensive labor reform that Puerto Rico needs means that timely, robust implementation of the remaining structural reforms, like ease of doing business reforms, is even more important to achieve meaningful economic growth. Without sustained dedication to implementing the 2019 Fiscal Plan, and the ambition to pursue additional structural reforms in the future, the structural challenges that have plagued the economy of Puerto Rico will not be addressed, and the Government will have lost its window to restore long-term opportunity to the people of Puerto Rico.

Appendix

Chapter 18. MODEL PRESENTATION

18.1 Overview of entities covered by and excluded from the 2019 Fiscal Plan

The 2019 Fiscal Plan addresses the finances of central government agencies, component units, and other agencies. Agencies for which an independent fiscal plan is being developed have not been consolidated into the 2019 Fiscal Plan and are only represented to the extent they impact the Commonwealth (Exhibit 77, Exhibit 78,

Exhibit 79)).

EXHIBIT 77: MAJOR ENTITIES INCLUDED IN AND EXCLUDED FROM THE 2019 FISCAL PLAN

	Major Entities Included in the 2019 Fiscal Plan		1. TSA	2. Major C	Us	3. Ot	her
	1. Central Government Entities 2. Major Component Units 3. Other Component Units and agencies		C		ASEM GDB ¹ CCPRC PRTC ASES PRITA		ghly 45 additional cies and conent units,
Included			Agencies: Department of Education, Department of Health, Police, etc.	Ports PBA ADEA HTA¹ DDEC AAFAF UPR¹ HFA SIFC PRCCDA		such as: Solid Waste Authority and Public Broadcasting Authority	
		Individually Reported – Comprises approx. 90% of Fiscal Plan Cash Flow			Re	Not Individually ported – approx. % of Fiscal Plan Cash Flow	
	Major Entities Excluded from the 2019 Fiscal Plan Excluded		Puerto Rico Electric Pov Authority (PREPA)			PR Aqueduct and Sewer A (PRASA)	
Excluded			The Children's Trust Fu	nd	COSSEC		Municipalities

¹ GDB , HTA, and UPR have separate and apart fiscal plans from the Central Government; HTA and UPR receive General Fund appropriations
2. Major CUs include the following IFCUs: ASEM, ASES, PRITA, Ports, PBA, ADEA, AAFAF, HFA, SIFC, PRCCDA
Note: Housing Finance Authority, resources from the Cap Funds (money transferred by HUD for financing projects and repayment of bonds) are not contemplated in the 2019 Fiscal Plan.

EXHIBIT 78: LIST OF ENTITIES COVERED BY THE 2019 FISCAL PLAN

Λαοροιί		Agonou	
Agency Code	Agency	Agency Code	Agency
3	Office of the Comptroller	43	Puerto Rico National Guard
10	General Court of Justice	45	Department of Public Safety
 1	Traffic Safety Commission	49	Department of Transportation and Public Works
14	Environmental Quality Board	50	Department of Natural and Environmental Resources
 15	Office of the Governor	55	Department of Agriculture
16	Office of Management and Budget	60	Citizen's Advocate Office (Ombudsman)
18	Planning Board	62	Cooperative Development Commission
21	Emergency Management and Disaster Admin Agency	65	Public Services Commission
22	Office of the Commissioner of Insurance	67	Department of Labor and Human Resources
 23	Department of State	68	Labor Relations Board
24	Department of the Treasury	69	Department of Consumer Affairs
- ' 25	Hacienda	70	State Insurance Fund Corporation (SIFC)
28	Commonwealth Election Commission	71	Department of Health
29	Federal Affairs Administration	71 75	Office of the Financial Institutions Commissioner
29 30	Office of Admin and Transformation of HR	78	Department of Housing
31	General Services Administration	79	Automobile Accident Compensation Admin (ACAA)
34	Investigation, Prosecution and Appeals Commission		
35		81	Department of Education Institute of Puerto Rican Culture
55 37	Industrial Tax Exemption Office Civil Rights Commission	82	
		87	Department of Sports and Recreation
38	Department of Justice	89	Horse Racing Industry and Sport Administration
10	Puerto Rico Police	90	Medical Services Administration (ASEM)
42	Puerto Rico Firefighter Corps	95	Mental Health and Addiction Services Administration
		96	Women's Advocate Office
100	Legislative Assembly	165	Land Authority of Puerto Rico
105	Industrial Commission	166	Industrial Development Company (PRIDCO)
106	Public Housing Administration	167	Company for the Integral Development of Cantera's Peninsu
109	School of Plastic Arts	168	Ports Authority
119	Dept of Economic Development and Commerce	177	Land Administration
120	Veterans Advocate Office	180	Tourism Company
121	9-1-1 Services Governing Board	184	Solid Waste Authority
122	Department of the Family	186	Culebra Conservation and Development Authority
123	Families and Children Administration	187	Health Insurance Administration (ASES)
124	Child Support Administration	188	PR and the Caribbean Cardiovascular Center Corp
126	Vocational Rehabilitation Administration	189	Institute of Forensic Sciences
27	Admin for Socioeconomic Develop of the Family	191	Musical Arts and Stagecraft Corporation
133	Natural Resources Administration	192	Fine Arts Center Corporation
37	Department of Correction and Rehabilitation	193	Office of Government Ethics
38	Institutional Trust of the National Guard of Puerto Rico	195	Economic Development Bank
39	Parole Board	196	Public Broadcasting Corporation
41	Telecommunication's Regulatory Board	198	Farm Insurance Corporation
152	Elderly and Retired People Advocate Office	200	Special Independent Prosecutor Panel
153	Advocacy for Persons with Disabilities of the CW of PR	208	Contributions to Municipalities (CRIM)`
155	State Historic Preservation Office	211	AFICA
161	Infrastructure Financing Authority	215	Conservatory of Music
	mmasmucture i mancing Aumunty		Our idea valury or ividate

221	Emergency Medical Services Corps
231	Health Advocate Office
235	Housing Financing Authority (HFA)
238	Port of the Americas Authority
241	Administration for Integral Development of Childhood
258	Puerto Rico Trade and Export Company
264	Martín Peña Canal ENLACE Project Corporation
265	Roosevelt Roads Naval Station Redevelopment
268	Institute of Statistics
272	Office of the Inspector General
273	Permit Management Office
276	Public-Private Partnership Authority
277	Agricultural Enterprises Development Admin (ADEA)
278	Puerto Rico Education Council
279	Public Service Appeals Commission
281	Office of the Electoral Comptroller
285	Puerto Rico Integrated Transport Authority (PRITA)
286	Ponce Port Authority

288	UPR Comprehensive Cancer Center
289	Energy Commission
290	Energy Affairs Office
293	Center for Research, Education and Medical Services for Diabetes
294	Bosque Modelo de Puerto Rico
295	Fiscal Agency and Financial Advisory Authority (AAFAF)
303	Convention Center District Authority (PRCCDA)
329	Socio-Economic Development Office
928	Government Employee Retirement System (ERS)
928	Judicial Retirement System (JRS)
929	Teacher Retirement System (TRS)
	Additional (Electronic) Lottery
	Maritime Shipping Authority
	Special Communities Perpetual Trust
	Traditional Lottery
	Unemployment Insurance Fund
	Corp for the Industries of Blind, Mentally Retarded, and Other Disabled People of Puerto Rico
	Puerto Rico Municipal Finance Corporation

Puerto Rico Municipal Finance Corporation

EXHIBIT 79: LIST OF ENTITIES EXCLUDED FROM THE 2019 FISCAL PLAN

Entities issuing standalone fiscal plan

- Development Bank for PR
- Aqueduct and Sewer Authority
- PR Electric Power Authority
- PR Highways and Transportation Authority¹
- Public Corporation for the Supervision and Deposit Insurance of Puerto Rico Cooperatives
- University of Puerto Rico²

Entities excluded from fiscal plan

- Agency Fund (Special Deposit Fund)
- Commonwealth of Puerto Rico Regional Center Corporation
- Public Finance Corporation (PFC)
- Puerto Rico Government Investment Trust Fund
- 1 Commonwealth Fiscal Plan includes HTA general fund appropriations 2 Commonwealth Fiscal Plan includes UPR general fund appropriations

- Puerto Rico Municipal Finance Agency
- Puerto Rico Water Pollution Control Revolv. Fund
- Safe Drinking Water Treatment Revolving Loan Fund
- The Children's Trust Fund
- Tourism Development Fund

Chapter 19. MACROECONOMIC PROJECTIONS

19.1 Incorporation of historical macroeconomic indicators for **Puerto Rico**

While the 2019 Fiscal Plan projects relatively steady growth after FY2018, the macroeconomic projections do not ignore the past macroeconomic trajectory of the Island. Historic economic performance remains a core driving factor for future projections, and without the implementation of structural reforms, the economy returns to the previous trendline once disaster spend begins to wane. As shown below (**Exhibit 80**,

Exhibit 81, **Exhibit 82**)), the nominal GNP of the Island continues to grow in the status quo, even while real output has shrunk considerably in the last decade.

EXHIBIT 80: MACROECONOMIC TRENDLINE BEFORE AND AFTER HURRICANE MARIA

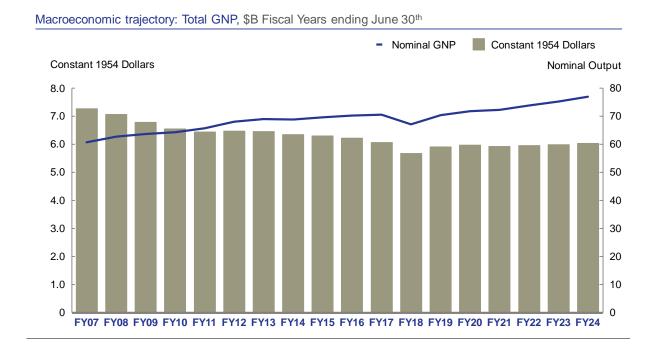


EXHIBIT 81: POPULATION DECLINE



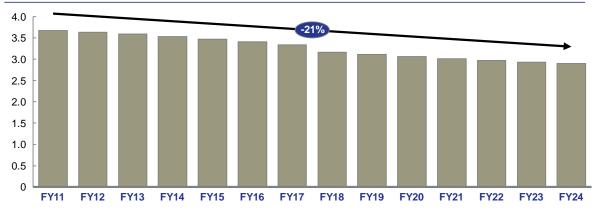
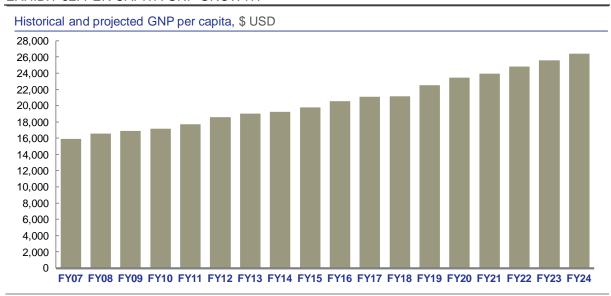


EXHIBIT 82: PER CAPITA GNP GROWTH



Chapter 20. FINANCIAL PROJECTIONS

20.1 Financial projection methodology

Revenue and expenditure forecasts are largely driven by macroeconomic projections like Puerto Rico inflation and GNP forecasts. For certain critical line items (such as Component Unit revenues and expenditure, pension expenditures and capital expenditures), separate detailed forecasts were developed incorporating historical data and other bottom-up assumptions.

20.2 Detailed financial projections

The following section discusses the financial projections across each revenue and expenditure line item from FY2018-FY2023. They also discuss the trajectory of key macroeconomic

indicators such as population and GNP per capita over the next five years (Exhibit 83). Most revenues track with the overall macroeconomic trajectory of the Island (

Exhibit 84). Baseline expenditures remain relatively constant over the next five years before measures are applied, especially when social programs are excluded (Exhibit 85). This consistency is in large part due to freezes on various expenditures that have been put in place by the Government of Puerto Rico. Finally, the cumulative value of measures grows through FY2023 as there is full implementation of various revenue and expenditure fiscal measures.

EXHIBIT 83: MACROECONOMIC OVERVIEW OF PUERTO RICO, FY2018-FY2024

Line item	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2019-24
Population, #	3,168	3,112	3,061	3,013	2,971	2,935	2,903	
Population growth rate, %	(5.1%)	(1.8%)	(1.7%)	(1.5%)	(1.4%)	(1.2%)	(1.1%)	
Real GNP growth, %	(4.7%)	4.0%	1.5%	(0.9%)	0.2%	0.1%	0.5%	
Nominal GNP, \$M	68,366	71,565	73,435	73,778	74,977	76,128	77,670	
Nominal GNP per capita, \$	21,578	22,995	23,994	24,483	25,233	25,940	26,756	
Nominal GNP per capita growth, %		6.6%	4.3%	2.0%	3.1%	2.8%	3.1%	
Inflation, %	1.6%	0.6%	1.1%	1.4%	1.5%	1.5%	1.5%	
Disaster funding, \$M	14,619	9,109	8,570	7,133	8,829	8,563	6,774	49,987
Revenues ¹ , \$M	\$22,425	\$23,581	\$22,053	\$20,790	\$20,667	\$20,555	\$20,778	128,424
Commonwealth revenues	15,689	16,288	16,072	15,856	15,669	15,488	15,639	95,013
Federal transfers	6,736	7,293	5,981	4,934	4,998	5,067	5,139	33,411
Expenditures ¹ , \$M	(\$19,935)	(\$20,341)	(\$19,480)	(\$19,005)	(\$18,651)	(\$18,595)	(\$18,658)	(114,731)
Commonwealth-funded expenditures	(\$13,375)	(\$13,252)	(\$13,646)	(\$14,211)	(\$13,787)	(\$13,657)	(\$13,644)	(82,197)
Federallly funded expenditures	(\$6,560)	(\$7,089)	(\$5,835)	(\$4,794)	(\$4,864)	(\$4,938)	(\$5,014)	(32,534)
Gap/surplus, \$M	\$2,490	\$3,239	\$2,573	\$1,785	\$2,016	\$1,959	\$2,120	13,693
Contractual debt service payments ² , \$M	(\$1,745)	(\$1,770)	(\$1,798)	(\$1,742)	(\$1,767)	(\$1,782)	(\$1,692)	(10,550)
Net gap / surplus, \$M	\$745	\$1,469	\$775	\$43	\$249	\$177	\$429	3,143
Surplus potentially not available ³ , \$M	\$69	\$90	\$173	\$183	\$200	\$204	\$198	1,049

¹ Revenues and expenditures excluding gross up adjustments

² Debt service based on prepetition contractual debt obligations. Presented for illustrative purposes only & does not represent anticipated future payments on restructured debt. Includes GO, PBA, CCDA, PRIFA, PFC, ERS, PRIDCO. The 2019 Fiscal Plan does not assume any predetermined outcome of ongoing litigation with respect to GO bonds 3 These surplus amounts are generated by Commonwealth corporations and the Commonwealth's ability to access such surplus amounts could be at risk without further legislative action

EXHIBIT 84: REVENUE BREAKDOWN SHOWS GRADUAL POST-HURRICANE RECOVERY

Fiscal Year Ending June 30, \$M	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY19-24
Revenues								
General Fund Revenues:								
Individual Income Taxes	\$1,960	\$2,125	\$2,126	\$2,124	\$2,174	\$2,203	\$2,229	\$12,980
Corporate Income Taxes	1,776	2,175	2,190	2,098	2,001	2,023	2,026	\$12,513
Non-Resident Withholdings	637	653	654	650	616	572	576	\$3,722
Alcoholic Beverages	264	263	261	261	261	262	263	\$1,571
Cigarettes	121	120	119	118	118	119	119	\$713
Motor Vehicles	407	477	370	372	378	384	393	\$2,375
Excises on Off-Shore Shipment Rum	215	212	213	214	206	198	199	\$1,243
Other General Fund Revenue	324	354	363	365	371	377	384	\$2,214
Total	5,705	6,380	6,296	6,203	6,125	6,138	6,190	\$37,332
SUT Collections (excl. 53.65% PSTBA, FAM & CINE)	1,646	2,182	2,120	2,078	2,108	2,128	2,154	13,748
Act 154 Collections	1,915	1,915	1,831	1,691	1,447	1,199	1,199	9,282
PREPA Loan Repayment	5	309						309
General Fund Revenue	\$9,270	\$10,785	\$10,247	\$9,972	\$9,681	\$9,465	\$9,543	\$59,693
Component Unit Revenue	1,516	1,560	1,612	1,611	1,641	1,659	1,674	\$9,757
Additional SUT (53.65% PSTBA, FAM & CINE)	876	131	135	135	138	140	142	\$821
Third party ASES receipts (rebates and municipal contributions)	385	396	364	413	421	430	439	\$2,462
Other Tax Revenues	2,387	2,428	2,452	2,466	2,450	2,435	2,460	\$14,691
Other Non-Tax Revenues	465							-
SRF expense for Commonwealth Agencies	755	753	902	836	848	860	872	\$5,070
Adj. Revenue Before Measures	\$15,654	\$16,054	\$15,711	\$15,433	\$15,178	\$14,989	\$15,131	\$92,495
Revenue Measures	35	234	361	423	491	499	509	\$2,518
Adj. Revenue Post Measures (Excl. Federal Transfers)	\$15,689	\$16,288	\$16,072	\$15,856	\$15,669	\$15,488	\$15,640	\$95,013
Federal Transfers to Central Government	4,259	4,308	4,289	4,333	4,381	4,433	4,487	\$26,233
Federal Transfers - Medicaid	2,301	2,820	1,526	432	446	460	475	\$6,159
Federal Transfers to Independent Component Units	176	164	166	169	171	174	176	\$1,020
Revenues Post Measures	\$22,425	\$23,581	\$22,053	\$20,790	\$20,667	\$20,555	\$20,778	\$128,424
Adjustments for revenue gross up	247	717	721	685	687	690	693	4,195
Revenue Post measures and post revenue gross u	ıp \$22,672	\$24,298	\$22,774	\$21,475	\$21,355	\$21,245	\$21,472	\$132,619

EXHIBIT 85: POST-HURRICANE EXPENDITURES

Fiscal Year Ending June 30, \$M	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY19-24
Expenses								
General Fund Expenditures:								
Direct Payroll	(\$2,996)	(\$2,961)	(\$2,970)	(\$3,002)	(\$3,037)	(\$3,081)	(\$3,126)	(\$18,178
Non-Personnel Operating Expenses	(1,508)	(1,736)	(1,617)	(1,659)	(1,676)	(1,707)	(1,732)	(\$10,127
Municipal Expenses	(298)	(220)	(220)	(220)	(220)	(220)	(220)	(\$1,318
Pension Expenses	(2,254)	(2,260)	(2,398)	(2,381)	(2,334)	(2,325)	(2,321)	(\$14,018
Disaster Recovery Cost Match	(271)	(190)	(100)	(100)	(100)	(100)	(100)	(\$690
Restructuring / Title III Costs	(132)	(333)	(251)	(206)	(174)	(156)	(42)	(\$1,162
UPR Appropriation and Other GF Expenses	(678)	(847)	(847)	(847)	(847)	(847)	(858)	(\$5,094
Loan to PREPA	(300)							-
Total General Fund Expenses (excl. inter gov transfers)	(\$8,437)	(\$8,546)	(\$8,402)	(\$8,415)	(\$8,388)	(\$8,437)	(\$8,398)	(\$50,587
Medicaid - commonwealth funded	(120)		(992)	(2,124)	(2,199)	(2,283)	(2,375)	(\$9,973
Social Programs - commonwealth funded	(15)	(15)	(15)	(15)	(15)	(15)	(15)	(\$91
Total General Fund Expenses (excl. inter gov transfers)	(\$8,572)	(\$8,561)	(\$9,410)	(\$10,554)	(\$10,602)	(\$10,735)	(\$10,789)	(\$60,652
Federal Funds, SRF, and CU operating expenses:								
Direct Payroll	(1,322)	(1,327)	(1,340)	(1,358)	(1,377)	(1,396)	(1,416)	(\$8,212
Non-Personnel Operating Expenses	(1,911)	(1,972)	(2,021)	(2,048)	(2,058)	(2,084)	(2,112)	(\$12,295
SRF expenses for Commonwealth Agencies	(451)	(643)	(778)	(790)	(803)	(816)	(828)	(\$4,659
Medicaid - federally funded	(2,301)	(2,820)	(1,526)	(432)	(446)	(460)	(475)	(\$6,159
Medicaid - SRF	(385)	(396)	(364)	(413)	(421)	(430)	(439)	(\$2,462
Social Programs - federally funded	(2,734)	(2,744)	(2,767)	(2,800)	(2,834)	(2,872)	(2,910)	(\$16,926
Total CW Funded Op. Exp.	(\$17,676)	(\$18,462)	(\$18,206)	(\$18,394)	(\$18,540)	(\$18,792)	(\$18,969)	(\$111,363
Expense Measures	49	498	1,024	1,829	2,214	2,502	2,646	10,76
Total CW Funded Op. Exp. Post Measures excl. Loss of Medicaid Funding	(\$17,627)	(\$17,965)	(\$17,182)	(\$16,565)	(\$16,326)	(\$16,290)	(\$16,324)	(\$100,651
Adjustment for expenditure gross up	(247)	(717)	(721)	(685)	(687)	(690)	(693)	(\$4,195
Net Operating Surplus/(Deficit)	\$4,800	\$4,798	\$5,616	\$4,872	\$4,225	\$4,341	\$4,264	\$27,77
Capex and Other Expenses								
Maintenance Capex	(147)	(278)	(382)	(397)	(411)	(417)	(424)	(\$2,309
Enterprise funds	(1,184)	(1,191)	(1,204)	(1,221)	(1,239)	(1,257)	(1,276)	(\$7,388
Disbursements of Tax Revenues to Entities Outside Plan	(685)	(786)	(591)	(700)	(675)	(631)	(635)	(\$4,019
Other Non-Recurring	(292)	(122)	(122)	(122)				(\$365
Total Capex and Other Expenses	(\$2,308)	(\$2,377)	(\$2,299)	(\$2,440)	(\$2,325)	(\$2,305)	(\$2,335)	(\$14,081
Surplus Post Measures (excl. Debt Payments)	\$2,490	\$3,239	\$2,573	\$1,785	\$2,016	\$1,959	\$2,120	\$13,69
Contractual Debt Service Payments ¹	(\$1,745)	(\$1,770)	(\$1,798)	(\$1,742)	(\$1,767)	(\$1,782)	(\$1,692)	(\$10,550
Surplus after Measures and Debt Payments	\$745	\$1,469	\$775	\$43	\$249	\$177	\$429	\$3,14
Surplus potentially not available ² , \$M	\$69							

¹ Debt service based on prepetition contractual debt obligations. Presented for illustrative purposes only and does not represent anticipated future payments on restructured debt.
2 These surplus amounts are generated by Commonwealth corporations and the Commonwealth's ability to access such surplus amounts could be at risk without further legislative action.

Chapter 21. STRUCTURAL REFORMS

21.1 Human capital and welfare reform

States across the mainland U.S. have different approaches to labor market and welfare policy, including different employee protections, incentives for employers, or benefits to workers. California and Florida represent opposite ends of this spectrum of approaches, with California intervening more in the labor market while Florida requires little above what is required by the federal Fair Labor Standards Act. At the same time, these two states allow for much freer and less regulated labor markets than Puerto Rico's approach and both have significantly higher levels of employment, incomes and economic opportunity.

California offers workers more protections and benefits than most states (e.g., mandated paid sick leave and multiple exemptions to employment at-will) while Florida offers very few (e.g., no guaranteed leave, no exceptions to employment at-will). California has one of the highest minimum wages in the country (\$10.50/hour) while Florida offers a lower minimum wage (\$8.25/hour) yet does not require workers to pay state income tax.

Despite these differences, Florida and California are closer in both labor market environment and outcomes than Puerto Rico: for example, both are employment at-will jurisdictions and have long-term work requirements in place for SNAP, while Puerto Rico has neither. Puerto Rico has more generous policies for "secondary benefits": Florida requires none and California offers 24 hours (3 days) of paid sick leave, while Puerto Rico's guarantees of a yearly Christmas bonus, severance pay, 27 days of paid time off, and maternity leave are far beyond those required by any mainland state.

California's labor force participation rate is 62.3%, and Florida's is 59.4%, versus approximately 40% in Puerto Rico. 145 This difference implies that, relative to the size of the population, California and Florida have roughly 50% more individuals in the labor force than Puerto Rico. Put another way, if Puerto Rico increased its labor force participation rates to those of California or Florida, household incomes would rise by roughly 50% and poverty would plummet.

21.2 Ease of doing business reform

An analysis of Puerto Rico's Ease of Doing Business rankings across all World Bank indicators shows which are most in need of targeted reforms for improvement (**Exhibit 86**).

¹⁴⁵ U.S. Department of Labor, Bureau of Labor Statistics, "Local Area Unemployment Statistics," March 23, 2018

		Prio	ority due to largest gap and h	ighest potential impact
	Puerto Rico Rank (2018)	Puerto Rico Rank (2019)	Change	USA (2019)
Overall	64	64		8
Starting a business	47	53	-6	53
Construction permits	138	141	-3	26
Getting electricity	69	88	-19	54
Registering property	153	159	-6	38
Getting credit	6	3	3	3
Protecting minority investors	108	110	-2	50
Paying taxes	161	162	-1	37
Trading across borders	64	67	-3	36
Enforcing contracts	113	63	50	16
Resolving insolvency	9	10	- 1	3

Chapter 22. FISCAL MEASURES

22.1 Agency efficiency measures

22.1.1 Addressable spend for agency efficiency measures

Not all governmental agency spend was expected to be addressable through rightsizing initiatives. For instance, federal funding to agencies which would disappear if it were not allocated to its current use were not targeted for reductions.

The following cost concepts are assumed to be addressable for spend reductions within Agency Efficiencies (see *Chapter 12*).

Personnel expenditures.

o Payroll and related costs (Nómina y costos relacionados)

Non-personnel expenditures.

- Materials and supplies (Materiales y suministros)
- Purchase of equipment (Compra de equipo)
- o Transportation expenditures (Gastos de transportación)
- Other operating expenditures (Otros gastos operacionales)
- Purchased services (Servicios comprados)
- o Announcements and guidelines in media (Anuncios y pautas en medios)
- Facilities and payments for public services (Facilidades y pagos por servicios públicos)
- Professional services (Servicios profesionales)
- Utilities

- Non-personnel expenditures partially included. The following cost concept
 was determined to be a miscellaneous category that included a collection of both
 addressable and non-addressable spend. Therefore, while all category spend was
 included in the addressable spend baseline, only 50% of category spend was included
 in actual savings initiatives as a haircut to separate addressable and non-addressable
 spend
 - Enrolled assignments (asignaciones englobadas)
- Non-personnel expenditures included on a case-by-case basis. The
 following cost concepts were included as addressable spend, and individual decisions
 were made to determine whether each agency's costs within those concepts were
 addressable within Agency Efficiencies, or whether they did not represent addressable
 spend (e.g., governmental transfer payments, tax incentives which were addressed via
 corporate tax reform, etc.)
 - Government entities (Entidades gubernamentales)
 - Contributions to non-governmental entities (Aportaciones a entidades no gubernamentales)
 - O Donations, subsidies and distribution (Donativos, subsidios y distribuciones)
- Out of scope. The following cost concepts were excluded from agency efficiencies for a variety of reasons (e.g., payments related to debt service or pensions, liquidity reserves, etc.)
 - Assignment pareo federal funds (Asignación pareo fondos federales), apart from Title I funding
 - Budget reserve (Reserva presupuestaria)
 - o Investment in permanent improvements (Inversión en mejoras permanentes)
 - o Payment of pensions pay as you go (Pago de pensiones pay as you go)
 - o Liquidity reserve (Reserva de liquidez)
 - Adjustment
 - Payment of the debt (Pago de la deuda)

All expenditures funded by the General Fund and Special Revenue Funds are assumed to be addressable provided they were expenditures in the above addressable cost concepts (e.g., General Fund expenditures within "Purchased services").

22.1.2 Agency efficiency measures

Back-office or support function payroll savings come from finding efficiencies by reducing personnel in non-client facing functions in each agency. These positions include administrative roles such as finance, human resources, and information systems, as well as some facilities support.

- a. For standalone agencies, support service payroll savings are calculated at **15-20%**, based on successful public-sector cases primarily involving digitization and process improvement, including the implementation of lean management practices.
- b. For newly merged agencies, back-office or support function payroll savings are calculated at 40-50%. The single consolidated agency will be able to use scale efficiencies through the combination of support services and elimination of duplicate functions and roles. The savings value is based on private sector examples of mergers and acquisitions and public sector examples of consolidations.
- c. In some cases, more savings can be captured when there is an agency-specific back office initiative that can be identified beyond standard optimization.

Frontline payroll savings were identified using a tailored deep-dive for each major agency for both merged and standalone agencies. The approach involved a review of each program and service (both citizen-facing and intergovernmental) to determine if the service levels provided should continue and/or if specific services could be delivered more effectively (e.g., through process improvement, innovative tools and technology, organizational and delivery changes). For applicable programs, spending levels are benchmarked against appropriate peer governments (either state or federal, or in some cases international examples). Additionally, macroeconomic analysis can be used to determine if lower payroll levels could serve the same number of residents based on expected changes in demographics, workforce levels, and the economy.

Non-personnel savings opportunities were expected to be largely driven through procurement and other streamlining efforts. Initiatives such as institutionalizing centralized demand controls, strategic category-level purchasing (e.g., leveraging Puerto Rico's access to federal GSA rates, purchasing through e-auctions, opening competitive RFPs), accounting for total cost of ownership, and enforcing contractual compliance could present large savings opportunities throughout the government.

Standalone agencies can implement initiatives including strategic sourcing and IT rationalization to better leverage the procurement function at a lower cost. The digitization and process improvement savings initiatives mentioned in support services can apply to procurement as well. Public sector agencies using these methods have saved **20**% on procurement spending.

Newly merged agencies have an additional opportunity to save on operational costs, with achievable savings of **30%**. In addition to the savings that a standalone agency can receive, consolidation of agencies should increase the leverage of Puerto Rican agencies in negotiating with the private sector, and bigger savings can be expected from duplication and combination of efforts. Merged agencies can also expect to find savings based on leveraging their smaller footprint, as well as lowering maintenance and facility costs.

Agency-specific initiatives and targets

The following **EXHIBIT 87** details the payroll and non-payroll savings for each of the agency groupings (see *Chapter 12*).

EXHIBIT 87: TOTAL REDUCTION PER AGENCY GROUPING 146

Personnel savings by agency grouping¹, \$1000s

	FY19		FY20		FY21		FY22		FY23		FY24	
Education	\$	36,983	\$	164,156	\$	272,555	\$	359,616	\$	422,244	\$	428,445
Courts and Legislature	\$	20,990	\$	23,168	\$	21,732	\$	21,838	\$	21,944	\$	22,267
Corrections	\$	34,180	\$	64,111	\$	94,874	\$	99,098	\$	103,356	\$	104,874
State Insurance Fund Corporation	\$	12,454	\$	49,456	\$	63,957	\$	67,587	\$	71,245	\$	72,291
Health	\$	38,296	\$	49,855	\$	51,155	\$	60,705	\$	69,734	\$	70,758
Public Works	\$	11,343	\$	18,301	\$	27,478	\$	29,254	\$	31,043	\$	31,499
Housing	\$	5,415	\$	17,111	\$	13,674	\$	15,824	\$	17,991	\$	18,255
Agriculture	\$	4,069	\$	6,578	\$	9,333	\$	9,698	\$	10,066	\$	10,214
Independent Agencies	\$	7,654	\$	14,249	\$	23,579	\$	24,833	\$	26,047	\$	26,430
Retirement Services	\$	1,474	\$	8,361	\$	1,474	\$	1,474	\$	1,474	\$	1,496
OCFO - Treasury	\$	10,490	\$	17,391	\$	27,619	\$	29,833	\$	31,950	\$	32,420
AACA	\$	2,212	\$	9,872	\$	6,097	\$	6,803	\$	7,486	\$	7,596
Labor	\$	3,012	\$	4,696	\$	7,654	\$	8,732	\$	9,800	\$	9,944
Executive Office	\$	6,736	\$	10,381	\$	14,516	\$	15,999	\$	17,494	\$	17,751
Justice	\$	3,576	\$	12,625	\$	16,938	\$	18,208	\$	19,488	\$	19,774
Economic Development	\$	9,065	\$	13,114	\$	20,003	\$	21,106	\$	22,218	\$	22,545
Families & Children	\$	8,701	\$	7,935	\$	17,217	\$	20,970	\$	25,010	\$	25,377
State	\$	889	\$	2,638	\$	2,111	\$	2,217	\$	2,324	\$	2,359
FOMB	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Culture	\$	1,507	\$	2,642	\$	4,054	\$	4,217	\$	4,381	\$	4,446
Finance Commission	\$	981	\$	1,683	\$	2,196	\$	2,384	\$	2,573	\$	2,611
Utilities Commission	\$	394	\$	595	\$	690	\$	817	\$	946	\$	959
Land	\$	1,057	\$	1,832	\$	2,657	\$	2,820	\$	2,985	\$	3,028
Closures	\$	957	\$	530	\$	889	\$	1,050	\$	1,213	\$	1,231
Ombudsman	\$	658	\$	1,175	\$	1,733	\$	1,892	\$	2,052	\$	2,082
Universities	\$	623	\$	(134)	\$	898	\$	1,027	\$	1,153	\$	1,170
Public Service Commission	\$	171	\$	(31)	\$	440	\$	507	\$	575	\$	583
DPS	\$	30,466	\$	(12,924)	\$	(72,487)	\$	(53,396)	\$	(44,025)	\$	(44,671)
Environmental	\$	6,039	\$	15,013	\$	15,067	\$	16,078	\$	17,097	\$	17,348
Custody Acct.	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Institute of Statistics	\$	74	\$	157	\$	195	\$	207	\$	220	\$	224
Transparency & Control Entities	\$	978	\$	978	\$	978	\$	978	\$	978	\$	992
Grand total	\$	261,444	\$	505,516	\$	649,277	\$	792,378	\$	901,065	\$	914,299

¹ Savings excludes additional savings achievable through utilities measures

Non-personnel savings by agency grouping¹, \$1000s

	FY19		FY20		FY21		FY22		FY23		FY24	
Education	\$	10,301	\$	61,496	\$	98,900	\$	122,355	\$	123,931	\$	125,751
Courts and Legislature	\$	33,952	\$	60,535	\$	57,718	\$	63,391	\$	69,199	\$	70,216
Corrections	\$	8,931	\$	26,479	\$	31,996	\$	32,150	\$	32,305	\$	32,780
State Insurance Fund Corporation	\$	4,878	\$	10,348	\$	15,648	\$	15,879	\$	16,111	\$	16,347
Health	\$	14,389	\$	(628)	\$	10,655	\$	20,163	\$	20,282	\$	20,580
Public Works	\$	7,371	\$	7,481	\$	16,415	\$	16,656	\$	16,899	\$	17,148
Housing	\$	1,195	\$	8,118	\$	9,444	\$	9,584	\$	9,723	\$	9,866
Agriculture	\$	391	\$	19,993	\$	20,754	\$	21,059	\$	21,367	\$	21,681
Independent Agencies	\$	3,417	\$	9,383	\$	18,326	\$	18,551	\$	18,754	\$	19,030
Retirement Services	\$	-	\$	17,260	\$	339	\$	344	\$	349	\$	354
OCFO - Treasury	\$	9,045	\$	950	\$	2,656	\$	3,039	\$	3,324	\$	3,373
AACA	\$	4,012	\$	5,330	\$	12,737	\$	12,925	\$	13,114	\$	13,306
Labor	\$	3,091	\$	7,570	\$	9,901	\$	10,047	\$	10,194	\$	10,343
Executive Office	\$	4,818	\$	4,727	\$	3,680	\$	3,734	\$	3,788	\$	3,844
Justice	\$	329	\$	1,405	\$	1,777	\$	1,803	\$	1,829	\$	1,856
Economic Development	\$	8,724	\$	(856)	\$	15,991	\$	16,227	\$	16,464	\$	16,706
Families & Children	\$	-	\$	5,810	\$	18,790	\$	20,708	\$	23,281	\$	23,623
State	\$	374	\$	8,475	\$	1,236	\$	1,255	\$	1,273	\$	1,292
FOMB	\$	5,250	\$	10,971	\$	11,048	\$	11,127	\$	11,208	\$	11,372
Culture	\$	831	\$	2,432	\$	1,422	\$	1,443	\$	1,464	\$	1,485
Finance Commission	\$	600	\$	1,623	\$	1,979	\$	2,009	\$	2,038	\$	2,068
Utilities Commission	\$	444	\$	1,645	\$	1,500	\$	1,522	\$	1,544	\$	1,567
Land	\$	402	\$	901	\$	1,308	\$	1,309	\$	1,310	\$	1,329
Closures	\$	88	\$	2,416	\$	1,440	\$	1,461	\$	1,483	\$	1,505
Ombudsman	\$	204	\$	452	\$	675	\$	684	\$	694	\$	705
Universities	\$	88	\$	1,608	\$	809	\$	821	\$	833	\$	845
Public Service Commission	\$	157	\$	857	\$	488	\$	495	\$	502	\$	510
DPS	\$	9,472	\$	14,747	\$	27,932	\$	28,343	\$	28,757	\$	29,179
Environmental	\$	2,763	\$	(19,076)	\$	(15,193)	\$	(15,417)	\$	(15,642)	\$	(15,872)
Custody Acct.	\$	-	\$	110,841	\$	107,063	\$	108,640	\$	110,226	\$	111,845
Institute of Statistics	\$	80	\$	278	\$	308	\$	312	\$	317	\$	321
Transparency & Control Entities	\$	-	\$	-	\$		\$	-	\$	-	\$	-
Grand total	\$	135,597	\$	383,572	S	487,740	\$	532,619	\$	546,922	\$	554,955

¹ Savings excludes additional savings achievable through utilities measures

 $^{^{146}\,\}mbox{Education}$ investment in teacher salaries, text books are baked into number

	FY19		FY20		FY21		FY22		FY23	FY24	
Education	\$	47,283	\$	225,652	\$	371,455	\$	481,971	\$	546,175 \$	554,197
Courts and Legislature	\$	54,942		83,703	\$	79,449		85,229	\$	91,144 \$	92,482
Corrections	\$	43,111	\$	90,589	\$	126,870	\$	131,249		135,661 \$	137,654
State Insurance Fund Corporation	\$	17,332	\$	59,804	\$	79,606	\$	83,466	\$	87,356 \$	88,639
Health	\$	52,685	\$	49,227	\$	61,810	\$	80,868	\$	90,017 \$	91,339
Public Works	\$	18,715	\$	25,783	\$	43,892	\$	45,910	\$	47,943 \$	48,64
Housing	\$	6,610	\$	25,229	\$	23,118	\$	25,407	\$	27,714 \$	28,12
Agriculture	\$	4,460	\$	26,570	\$	30,086	\$	30,757	\$	31,433 \$	31,89
Independent Agencies	\$	11,070	\$	23,633	\$	41,905	\$	43,384	\$	44,801 \$	45,459
Retirement Services	\$	1,474	\$	25,621	\$	1,813	\$	1,818	\$	1,823 \$	1,850
OCFO - Treasury	\$	19,535	\$	18,341	\$	30,275	\$	32,873	\$	35,275 \$	35,793
AACA	\$	6,225	\$	15,202	\$	18,835	\$	19,727	\$	20,600 \$	20,902
Labor	\$	6,104	\$	12,266	\$	17,555	\$	18,779	\$	19,994 \$	20,287
Executive Office	\$	11,554	\$	15,108	\$	18,195	\$	19,733	\$	21,282 \$	21,594
Justice	\$	3,905	\$	14,030	\$	18,715	\$	20,011	\$	21,317 \$	21,630
Economic Development	\$	17,790	\$	12,258	\$	35,995	\$	37,333	\$	38,682 \$	39,250
Families & Children	\$	8,701	\$	13,746	\$	36,007	\$	41,679	\$	48,291 \$	49,000
State	\$	1,263	\$	11,113	\$	3,347	\$	3,472	\$	3,597 \$	3,650
FOMB	\$	5,250	\$	10,971	\$	11,048	\$	11,127	\$	11,208 \$	11,372
Culture	\$	2,338	\$	5,074	\$	5,476	\$	5,660	\$	5,845 \$	5,93
Finance Commission	\$	1,581	\$	3,306	\$	4,175	\$	4,392	\$	4,611 \$	4,679
Utilities Commission	\$	838	\$	2,240	\$	2,190	\$	2,339	\$	2,490 \$	2,526
Land	\$	1,459	\$	2,733	\$	3,965	\$	4,129	\$	4,295 \$	4,358
Closures	\$	1,045	\$	2,946	\$	2,329	\$	2,512	\$	2,696 \$	2,735
Ombudsman	\$	862	\$	1,627	\$	2,408	\$	2,577	\$	2,747 \$	2,787
Universities	\$	711	\$	1,474	\$	1,707	\$	1,848	\$	1,986 \$	2,015
Public Service Commission	\$	328	\$	826	\$	928	\$	1,002	\$	1,077 \$	1,093
DPS	\$	39,938	\$	1,823	\$	(44,555)	\$	(25,053)	\$	(15,268) \$	(15,492
Environmental	\$	8,802	\$	(4,062)	\$	(126)		661	\$	1,455 \$	1,476
Custody Acct.	\$		\$	110,841	\$	107,063	\$	108,640	\$	110,226 \$	111,849
Institute of Statistics	\$	154	\$	435	\$	502	\$	520	\$	537 \$	54
Transparency & Control Entities	\$	978	\$	978	\$	978	\$	978	\$	978 \$	992
Grand total	\$	397.041	\$	889,089	\$	1,137,017	\$	1,324,997		1,447,987 \$	1,469,254

Agency groupings are as shown below in Exhibit 88.

For each grouping, initiatives include:

- Front-line personnel reductions (by specific benchmark: unique benchmarks based on individual agency, as detailed in appendix, or by population)
- Back-office personnel reductions (by general benchmark: overarching benchmarks which apply to all agencies, as described in *Chapter 12*)
- Non-personnel optimization (by general benchmark)

EXHIBIT 88: AGENCY GROUPINGS

Agriculture	Agricultural Enterprises Development Administration Department of Agriculture	3 Farm Insurance Corporation
ourts and egislature	1 General Court of Justice (GCJ)	2 Legislative Assembly (LA)
culture	1 Fine Arts Center Corporation	Musical Arts and Stagecraft Corporation
	2 Institute of Puerto Rican Culture	
	Authority for the Redevelopment of Roosevelt Roads Naval Station	6 Permit Management Office
	Department of Economic Development and Commerce	7 Planning Board
conomic evelopment	3 Energy Affairs Office	Ruerto Rico Trade and Export Company
	4 Industrial Development Company	Regional Center Corporation of Commonwealth of PR
	5 Industrial Tax Exemption Office	10 Tourism Company
nvironmental	Department of Natural and Environmental Resources	3 Natural Resources Administration
nvironinentai	2 Environmental Quality Board	Solid Waste Authority
	1 Federal Affairs Administration	Office of Socioeconomic Development
vo autivo Offica	2 Infrastructure Financing Authority	Public Buildings Authority
xecutive Office	3 Office of the Commissioner of Municipal Affairs	7 Public-Private Partnership Authority
	4 Office of the Governor	State Historical Preservation Office
inance commission	Office of the Commissioner of Insurance	2 Office of the Financial Institutions Commissioner
OIIIIIIISSIOII	Center for Research, Education and Medical Services for Diabetes	4 Medical Services Administration
1 141	2 Department of Health	5 Medical health and Addiction Services Administration
lealth	3 Health Insurance Administration	6 Puerto Rico and Caribbean Cardiovascular Center Corporation
	7 University of Puerto Rico Comprehensive Cancer Center ¹	
lustice	1 Department of Justice	2 Parole Board
	Department of Labor and Human Resources	4 Public Service Appeals Commission
_abor	2 Investigation, Prosecution and Appeals Commission	5 Vocational Rehabilitation Administration¹
Luboi	3 Labor Relations Board	Vocalorial Chabitation 7 anii iotaton
and	1 Land Administration	2 Land Authority
Latiu	Advocacy for Persons with Disabilities of the Commonw ealth of Puerto Ric	-
Om budsman		
ombuasman	2 Elderly and Retired People Advocate Office	5 Women's Advocate Office
	3 Health Advocate Office	Production of the section of
Public Works	1 Department of Transportation and Public Works	3 Ports Authority1
	2 Integrated Transport Authority	4 Traffic Safety Commission
	1 Administration for Integral Development of Childhood	4 Department of the Family
amilies	2 Administration for Socioeconomic Development of the Family	5 Families and Children Administration
	3 Child Support Administration	A
Housing ²	1 Department of Housing	Public Housing Administration
	2 Housing Financing Authority	
State	1 Department of State	2 Puerto Rico Education Council
ransparency & Control Entities	1 Office of Government Ethics	2 Office of the Comptroller
	1 Puerto Rico Police Department (PRPD)	5 9-1-1 Services Governing Board
Department of	2 Firefighters Corps	6 Institute of Forensic Sciences
Public Safety	3 Emergency Medical Services Corps	Special Investigation Unit
	Emergency Management and Disaster Administration Agency	Department of Public Safety
	1 Department of the Treasury	Office of Management and Budget
Treasury/	2 Hacienda	5 General Services Administration
OCFO	3 Oficina de Administración y Transformación de los Recursos Humanos en	
Iniversities	el Gobierno de PR 1 Conservatory of Music¹	2 School of Plastic Arts ¹
Itilities	Puerto Rico Energy Board	3 Independent Bureau of Consumer Protection
Commission	Public Services Commission	Telecommunications Regulatory Board
	1 Model Forest of Puerto Rico	Culebra Conservation and Development Authority
Closures	2 Economic Development Bank	Saladia Consolivation and Development Authority
	Civilian's Advocate Office (Ombudsman)	10 Office of the Electoral Comptroller
	2 Civil Rights Commission	11 Company for the Integral Development of Cantera's Peninsula
	3 Commonwealth Election Commission	12 Port of Ponce Authority
		· · · · · · · · · · · · · · · · · · ·
ndependent	4 Convention Center District Authority	13 Port of the Americas
gencies	5 Cooperative Development Commission	14 Public Broadcasting Corporation
	6 Department of Consumer Affairs	15 Puerto Rico National Guard
	7 Department of Sports and Recreation	16 Special Independent Prosecutor Panel
	8 Industrial Commission	17 Teacher's Retirement System
	9 Martín Peña Canal ENLACE Project Corporation	18 Institute of Statistics 3 State Insurance Fund Corporation
	Automobile Accident Compensation Authority	

¹ Current draft of agency consolidation plan may leave this agency as a standalone entity 2 Federal funding requirements may limit consolidation of Housing agencies